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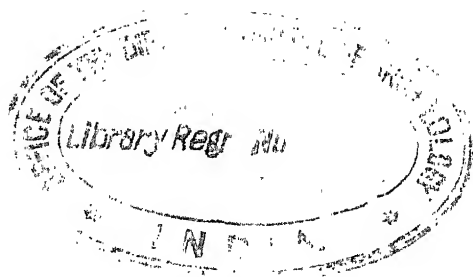
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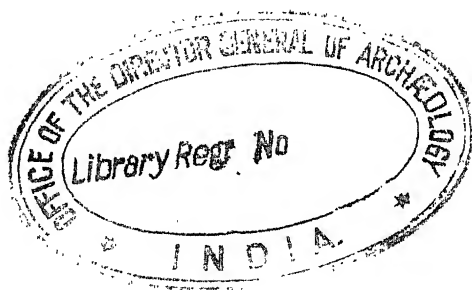
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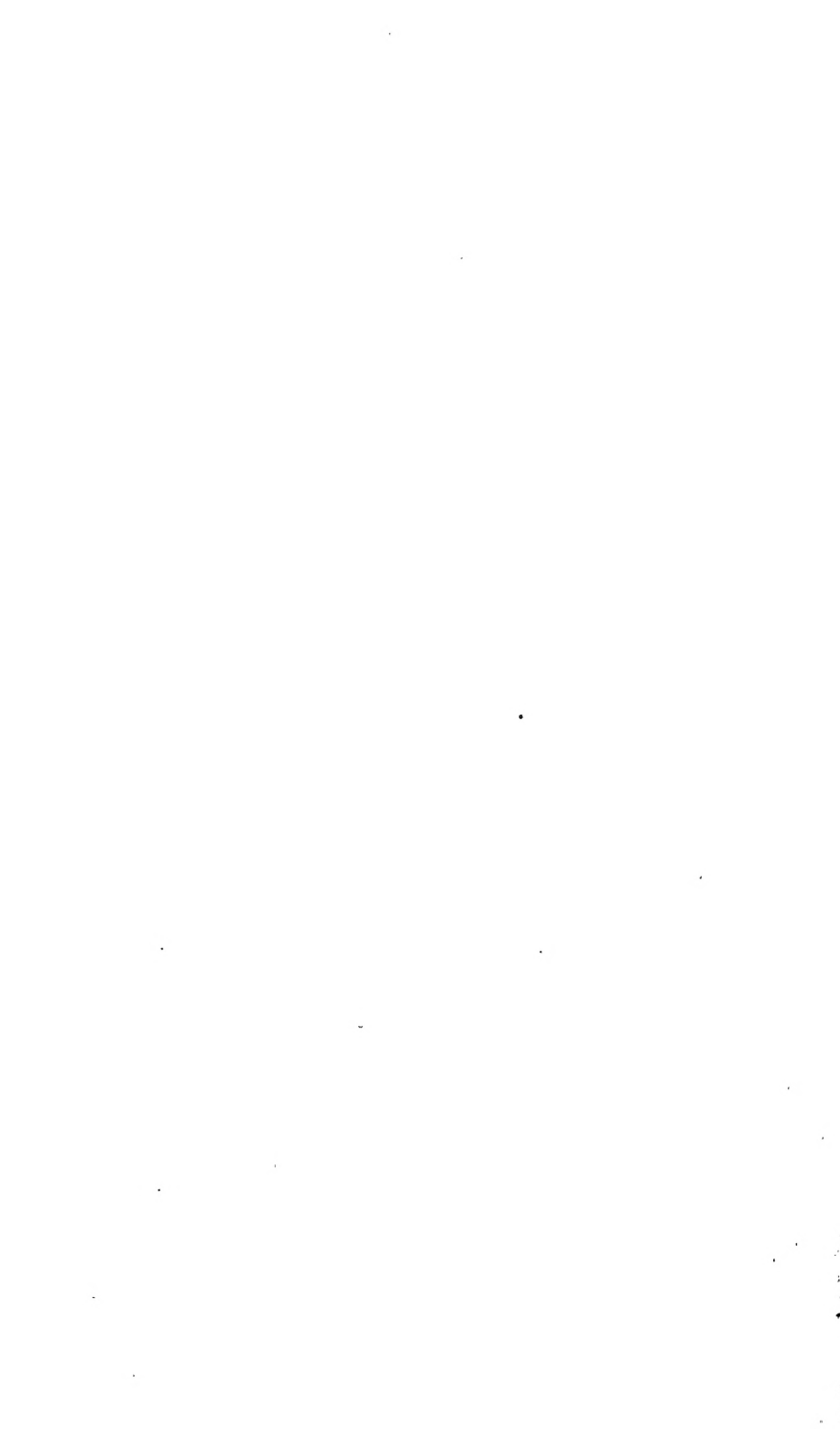
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THE
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AND
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THE
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 AND
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 OF THE
 NUMISMATIC SOCIETY.

EDITED BY
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 AND
 BARCLAY V. HEAD.

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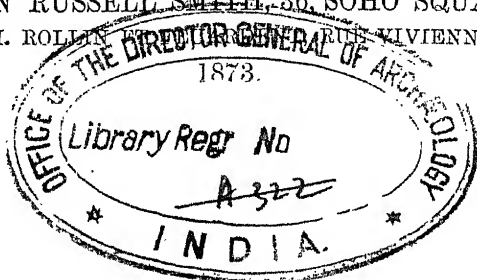
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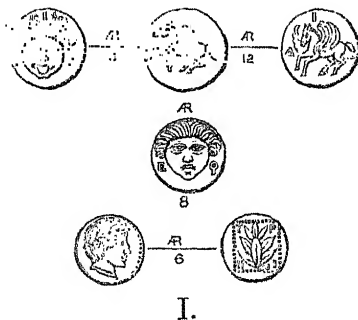
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NUMISMATIC CHRONICLE.



I.

L'INSCRIPTION "TPIH" SUR DES MONNAIES GRECQUES ANTIQUES.

1. \mathcal{A} . $1\frac{1}{2}$. Gr. 0.68.

Obv.—^{TP}_{HI} écrit dans les angles d'un carré creux, dont le milieu est occupé par une tête de Méduse de face, tirant la langue.

Rev.—Pégase aux ailes arrondies, bridé, et volant à gauche ; dessous, \bigcirc ; dans le champ, derrière lui, une tête de trident.—Ma collection.

2. \mathcal{A} . 1. Gr. 0.67.

Autre, parfaitement semblable, sauf que la légende est T—P, disposée des deux côtés au bas de la tête ; le champ au-dessus de la tête est vide.—Ma collection.

3. \mathcal{A} . $1\frac{1}{2}$. Gr. 0.75.

Obv.—^I_{TP}. Tête de Méduse de face, tirant la langue, les cheveux hérissés ; le tout dans un champ légèrement concave.

Rev.—Pégase libre, aux ailes arrondies, volant à gauche; dessous, Φ .—Ma collection; gravée dans mon "Choix de Monnaies Grecques," 1871, pl. i. No. 8.

4. \mathcal{A} . $1\frac{1}{2}$. Gr. 0.62.

Autre, avec $\begin{smallmatrix} (P) \\ T-I \end{smallmatrix}$.—Ma collection.

5. \mathcal{A} . 1. Gr. 0.39.

Obv.—Protomè de cheval à droite.

Rev.— $\begin{smallmatrix} TP \\ HI \end{smallmatrix}$ inscrit dans les quatre compartiments d'un carré creux.—Millingen, *Syllogo*, pl. ii. 17; *Num. Chron.*, 1871, pl. vi. 5.

6. \mathcal{A} . 1. Gr. 0.43.

Obv.—Tête laurée d'Apollon à droite.

Rev.— $\begin{smallmatrix} TP \\ HI \end{smallmatrix}$ Branche d'une plante incertaine; le tout dans un carré de quatre lignes percées; champ plat.—Ma collection; gravée dans mon "Choix de Monnaies Grecques," pl. i. 9.

7. \mathcal{A} . 1. Gr. 0.41.

Autre, avec la tête d'Apollon à gauche.—Ma collection.

La pièce No. 6 ne se distingue de ses semblables, déjà connues, que par la direction de sa tête, et par le dessin de la plante, qui est plus clair et plus détaillé que celui des variétés publiées jusqu'à ce jour.

En abordant, à mon tour, la question touchant le classement des petites monnaies d'argent, marquées des légendes $\begin{smallmatrix} TP & TP & PI \\ HI & HI & TH \end{smallmatrix}$ et $\begin{smallmatrix} I \mathcal{A} \\ HI \end{smallmatrix}$ question qui déjà tant de fois a été débattue sans que le nœud gordien fut jamais bien tranché, je ne puis m'empêcher d'un sentiment de juste appréhension, que la plupart des lecteurs du *Numismatic Chronicle*, fatigués du nombre des propositions peu satisfaisantes qui ont paru dans ce journal, ne seront guère disposés à accorder leur attention à une nouvelle dissertation sur le même sujet. Aussi n'oserais-je pas la leur présenter, si les monnaies dont il s'agit, n'avaient pas été

l'objet de recherches sérieuses de ma part, et si je ne pouvais point avoir la conviction d'avoir trouvé enfin, après plus d'une refonte de mon travail, la solution des difficultés qui s'étaient opposées à tout classement tenté jusqu'à présent. Ces attributions, qu'il importe de nous rappeler, se rapportaient :—

1. A la ville de *Corinthe* ;
2. A la ville de *Tirida* en Thrace ;
3. Aux *Trères* ou *Trières* de Thrace ;
4. A *Terès*, roi des Odryses ;
5. A la ville de *Tyrrissa* en Macédoine ;
6. A une ville de la *Bithynie* ;
7. A la ville de *Téria* de la Troade ;
8. Aux *Trères* de la Lycie ;

et en dernier lieu, enfin, on a fait l'essai d'expliquer la légende comme un *indice de valeur*, pour ΤΡΗΗμωβόλιον.¹

Il est évident, que ce n'était qu'à force de vouloir mettre en rapport les quatre lettres de la légende avec quelque nom géographique *connu*, qu'on s'était épuisé en tant de conjectures et de leçons différentes. Cependant de tout temps la leçon ΤΡΗΗ avait prévalu dans l'opinion générale ;

¹ Cf. *Mionnet*, iii. 187, 889, Pl. LIV. 7, et Suppl. III. 178, 1123 et 1124 ; Suppl. IV. 34, 187 ; 48, 312 ; Suppl. V. 582, 515 et 516 ; *Sestini*, lett. contin. iv. 59, 1 and 2 ; *Cousinéry*, Essai, Pl. I., 13 ; *Cadalvène*, Recueil, p. 175, Pl. II. 25 ; *Dumersan*, Catal. Allier de Hauteroche, Pl. XIII. 18 ; *Raoul-Rochette*, Journal des Savants, 1829, p. 301 ; *F. Streber*, Num. nonnulla Græca, 1833, Pl. I. 18 à 23 ; *Millingen*, Sylloge, Pl. II. 17 ; *Borrell*, Num. Chron., iii. 112 ; *Archæol. Zeitung*, 1845, p. 118 ; 1846, p. 376 ; 1848, Beilage, 6, p. 84 ; *L. Müller*, Cat. Thorwaldsen, p. 20 ; *De Prokesch-Osten*, Inedita, 1854, p. 40 ; *Burton*, Num. Chron., xix. 284 ; *Leuko*, Num. Hell. Asiat. Gr., p. 154 ; *Brandis*, Münzwesen in Vorderasien, p. 446, 524, et 593 ; et enfin *Percy Gardner*, dont la note au Num. Chron., 1871, p. 162, Pl. VI. 4 à 6, m'a principalement engagé à revoir la mienne, écrit il y a déjà quelques années, et à la publier.

et en effet elle est la seule possible et n'avait guère besoin d'être confirmée par la découverte des monnaies No. 2 à 4, dont les inscriptions TP et TPI excluent toute autre façon de lire. Cette certitude acquise, nous pouvons effacer presque toute notre liste, exceptés les noms des Trières et de Corinthe, et la proposition de M. Gardner, qui restent à discuter.

Arrivé à ce point, il est nécessaire d'anticiper le résultat de cet examen, et de poser la proposition, que les monnaies portant l'inscription TPIH ne forment point un *seul* groupe numismatique, mais qu'elles se divisent en *deux classes bien distinctes*, dont l'une, caractérisée par les types du pégase et du gorgonium et par les lettres Q ou A, appartient à *Corinthe* et à *Leucas*, et l'autre, comprenant les Nos. 5 à 7 et leurs variantes, à quelque localité de la *Thrace* ou de la *Macédoine*.

Pour être informés des lieux où l'on trouve le plus ordinairement les monnaies dont il s'agit, nous n'avons qu'à nous adresser aux écrits de Cadalvène et de Borrell. Le premier, en publiant l'une des monnaies avec le pégase (*Rec.*, p. 176, pl. II., 25), nous dit: "qu'elles se trouvent souvent en Macédoine, à laquelle je pense qu'elles doivent appartenir." Et H. P. Borrell, en attribuant à Tirida en Thrace tant les pièces au pégase que celles à la protomé de cheval et à la tête d'Apollon (*Num. Chron.*, III., p. 114), s'exprime au même sujet de la manière suivante: "These coins no doubt originated with some people, city, or chief of Thrace or Macedonia, the places from whence they are constantly brought; and twenty years' experience has sufficiently enabled me to establish this fact." À ces citations d'auteurs dignes de foi, il me reste toutefois à ajouter, que les pièces marquées du Koppa ou du Lambda proviennent le plus souvent de trouvailles composées de

monnaies de Corinthe et de l'Acarnanie.² Ce fait, bien qu'il paraisse contredire les assurances de Cadalvène et de Borrell, n'empêche cependant point l'exactitude des dernières. Car on ne saurait s'étonner de ce que dans des pays situés au nord de l'Archipel, pays avec lesquels les Corinthiens avaient entretenu des relations de commerce et où même ils avaient établi des colonies (Potidée), on retrouve de temps à autre quelques pièces d'argent Corinthien, et il est plus que probable que ni Cadalvène ni Borrell n'avaient connu la provenance d'autres exemplaires de ces monnaies que celle des leurs. Aussi est-il tout naturel qu'ils avaient cru en avoir à faire à un groupe unique de monnaies, et n'avaient pu songer à la distinction de deux séries, telle que je viens de la proposer.

A.—*La série aux types corinthiens.*

Si même la provenance ordinaire des monnaies de cette série (Nos. 1 à 4) n'était pas constatée au point de nous *contraindre* à les retirer de la Macédoine et de la Thrace, nous ne serions pas moins obligés à les restituer à Corinthe ou à celles de ses colonies dont elles portent la marque; car à ces ateliers seuls reviennent les types combinés du *gorgonium* et du *pégase* accompagnés du Koppa, du Lambda, ou de quelqu'autre lettre ou monogramme. Depuis les publications de Mionnet et de ses contemporains on a découvert bon nombre de petites monnaies parfaitement semblables à nos Nos. 1 à 4, ou datant de la même époque que celles-ci, ou étant de fabrique un peu plus récente;

² Déjà en 1848 le Comte de Prokesch-Osten nous informa d'avoir reçu du *Peloponnèse* plusieurs exemplaires de ces monnaies, et signalait à cette occasion cinq pièces avec le Koppa, et quatre pièces avec le Lambda (Archæol. Zeitung, 1848, Beilage 6, p. 84).

toutes ont été frappées à Corinthe, à Leucas, et à Anactorion, et ne se distinguent des pièces avec TP, TPI, et TPIH que par ce que ces inscriptions y manquent, ou se trouvent remplacées par d'autres lettres. Voici la description de quelques-unes de ces monnaies, à laquelle j'ajouterai celle d'un petit *bronze* inédit, faisant partie de la même série :—

8. *Æ*. 1. Gr. 0·55 (poids diminué par le nettoyage).

Obv.—Tête de Méduse de face, les cheveux hérissés ; au bas, les lettres E—Q.

Rev.—Pégase, les ailes droites, volant à gauche : dessous, Q.—Ma collection.

9. *Æ*. 1. Gr. 0·69.

Obv.—Même tête de face, entourée de serpents ; dessous, ξ.

Rev.—Même type ; dessous, A.—Ma collection ; gravée dans mon "Choix de Monnaies Grecques," pl. i., 38. Cf. les variétés publiées par Millingen, *Ancient Coins*, pl. iv., 3 ; Leake, *Num. Hell. Eur. Gr.*, p. 62 ; Postolacca, *Cat. des Monnaies de Coreyro, de Leucas, etc.*, Nos. 645 à 647.

10. *Æ*. 1. Gr. 0·64.

Obv.—Même tête de face, les cheveux hérissés.

Rev.—Pégase, les ailes arrondies, volant à gauche ; dessous, A. Musée de Berlin.

11. *Æ*. 2. Gr. 2·20.

Obv.—Même tête de face, tirant la langue.

Rev.—Protomé de Pégase à gauche, les ailes recoquillées ; dessous, Q.—Ma collection.

Il est clair que ces monnaies, et celles qui portent l'inscription TPIH, étaient sorties des mêmes ateliers, et cela constaté, il ne s'agit plus que de l'explication de cette inscription.

En comparant, entre elles, toutes les variétés connues des plus petites fractions de la drachme corinthienne,³

³ A côté du *statère* corinthien de gr. 8·60 et de sa moitié de gr. 4·20 (cette dernière aux types de Bellérophon et de la Chimère), les villos de Corinthe, de Leucas, et d'autres, avaient

savoir les dioboles, les trihémibolies, les oboles, et les hémibolies, qui ont été frappées d'après le même système monétaire à Corinthe, à Leucas, et à Anactorion, et dont les types respectifs étaient partout les mêmes, on trouvera que des inscriptions telles que φ —A, A—P, E— φ , E—Y, etc., ne figurent que sur des pièces émises à Corinthe, et jamais sur celles de Leucas, et que par-contre les caractères Σ ou ξ ne se rencontrent que sur les dernières, et point sur celles de Corinthe. Ces marques se rapportent donc probablement aux monétaires. Il en est autrement des légendes ΤΡΗΗ ou TP, et ΔΙΟ ou ΔΙΩ,⁴ qu'on doit être

frappé, d'après un système particulier, des drachmes et des fractions de drachmes du poids suivant :—

Gr. 2·91 : *drachme* (Obv.—Tête de femme ou d'Apollon ; Rev.—Pégase.)

„ 1·94 : *tétrobolon* (mêmes types.)

„ 1·45 : *tribolon* (Obv.—Même tête ; Rev.—Protomé de Pégase.)

„ 0·97 : *diobolon* (Obv.—Pégase ; Rev.—Pégase ; ou Obv.—Tête de Pégase ; Rev.—Δ.)

„ 0·78 : *trihémibolion* (Obv.—Gorgonion ; Rev.—Pégase.)

„ 0·48 : *obolos* (Obv.—Trident ; Rev.—Pégase, ou Obv.— $\frac{1}{2}$; Rev.—Pégase.)

„ 0·36 : *tritémorion* (?)

„ 0·24 : *hémibolion* (Obv.—Trident ; Rev.—Tête de Pégase.)

Il est inutile de faire remarquer, que quelques rares exemplaires peuvent dépasser ces poids de quelques centigrammes ; et que la majeure partie des pièces pèsent moins que le poids normal. Cf. Mommsen, *Röm. Münzwesen*, p. 60 et 62, traduction Blacas, i. p. 80 et 83 ; Hultsch. *Métrologie*, p. 259.

⁴ Voyez la vignette marquée de No. 12, et combinée avec le revers du No. 3 (gr. 0·90 à 0·82.) A mon avis, il ne peut plus avoir de doute, que la dernière lettre d'une prétendue légende ΔΙΟΜ n'avait jamais été vue sur la pièce publiée par Sestini (*Mus. Fontana*, ii., Pl. V. 5.) Quant à ce qui concerne le caractère Δ, représenté comme type sur le revers des dioboles qui portent au droit le buste de Pégase accosté d'un Koppa ou d'un Lambda, il est très-probable qu'il indique l'initiale du mot Διόβολον. Cadalvène (*Recueil*, p. 153) a décrit une pièce semblable avec ΔΙ au revers, ce qui paraît confirmer la con-

étonné de retrouver sur des *trihémiobolies* et des *dioboles*, frappées, tant à Corinthe qu'à Leucas, et que peut-être retrouvera-t-on encore sur des pièces d'Anactorion. Cette circonstance, et le fait que ces monnaies, à en juger d'après leur fabrique *avec* et *sans* le carré creux, les ailes du pégase tantôt *arrondies*, tantôt *droites*, et de l'apparition simultanée de l'*Omicron* et de l'*Omega* dans $\Delta\omega$. . . , avaient été frappées pendant une période d'assez longue durée, prouvent à l'évidence que ni TPIH ni $\Delta\Omega$ ne désignaient des magistrats. Par conséquent il n'y a rien de mieux à faire que d'admettre pour cette classe de monnaies l'explication que nous devons à M. Percy Gardner, c'est-à-dire, de compléter les deux légendes par TPIH- $\mu\omega\beta\acute{o}\lambda\iota\omicron\nu$ et $\Delta\Omega\beta\omicron\lambda\omicron\nu$, deux dénominations qui conviennent en effet fort bien au système et au poids des pièces respectives.⁵

Par-contre il n'en est nullement ainsi des lettres $\Delta\Gamma$ inscrites sur quelques drachmes de Corinthe du système attique, lettres auxquelles M. Gardner (l.c., p. 165, pl. vi. 1) essayait également de revendiquer le sens d'un indice de valeur, tandis qu'elles ne désignent en vérité qu'un magistrat; car les mêmes lettres jointes aux mêmes symboles, comme par exemple $\Delta\Gamma$ et la pomme de

jecture. C'est à tort que j'avais rejeté cette idée dans ma note sur les monnaies faussement attribuées à Délion (Num. Zeitschr. Wien, 1871, p. 331 à 333); j'avais été alors sous l'impression des différences de taille et de poids, qui peuvent s'expliquer par diverses circonstances, et je n'avais point songé à ce que Δ , considéré comme indice de valeur, pouvait signifier autre chose que le chiffre quatre.

⁵ Un diobolon avec $\Delta\Gamma\Omega$, et un trihémiobolon avec TPI, tous les deux de ma collection, dépassent le poids normal de gr. 0.97 et 0.73, en pesant gr. 1.01 et 0.75, tandis que d'autres exemplaires s'écartent le plus ordinairement du poids normal dans le sens opposé, selon l'état de leur conservation.

pin, AA et la cuirasse, AA et un bouclier, AA et un triskèle renfermé dans un cercle, se rencontrent indifféremment et sur des *statères* corinthiens de gr. 8·60, et sur des drachmes frappées aux types de la chimère et de Bellérophon.⁶

Les inscriptions TPIH et ΔΙΩ me paraissent être les exemples les plus anciens de légendes qui expriment la dénomination de valeur des pièces. Au reste ces exemples sont fort rares du temps de l'autonomie grecque. À l'exception de l'inscription ΟΒΟΛΟΣ sur des bronzes de Métaponte, et des dénominations des monnaies attribuées à Simon Macchabée, toutes les autres légendes de ce genre dont je puisse me souvenir, datent de l'époque romaine: ΑCΘΑΠΙΟΝ, ΑCΘΑΠΙΟΝ ΗΜΙ et ΗΜΥCΥ, ΑCΘΑΠΙΑ ΔΥΩ et ΤΡΙΑ (Chios), ΔΙΑΠΑΧΜΟΝ (Ephèse et Rhodes), ΔΙΧΑΑΚΟΝ (Chios), ΔΠΑΧΜΗ (Byzance, Mélos, et Ephèse), ΗΜΙΟΒΕΑΙΝ (Ægium), ΟΒΟΛΟC (Chios), ΤΡΙΧΑΑΚΟΝ et ΤΕΤΡΑΧΑΑΚΟΝ (Chios), ΤΡΙΩΒΟΛΟ . . (Samothrace), ΧΑΑΚ. ΙΙΙ (Abydos), ΧΑΑΚΟΥΣ (cf. Mus. Hunter, pl. lxviii, 11 à 14); et, en considération de la grande distance des époques, elles ne se prêtent au fond guère à l'analogie que M. Gardner a fait ressortir entre ces légendes et les inscriptions Τρη . . . et Δω . . .

B.—*La série aux types du cheval et d'Apollon.*

Nous avons déjà vu, que les monnaies de cette série proviennent constamment des pays situés au nord de la

⁶ Un exemplaire anépigraphe mais bien conservé de ces drachmes, ayant fait partie d'un choix de M. Lambros d'Athènes, pèse gr. 4·20. Le poids de presque tous les autres exemplaires connues est beaucoup plus faible, ce qui provient du mauvais état de conservation dans lequel on rencontre généralement ces pièces.

mer d'Egée. Elles portent en effet, ainsi que Streber et Borrell l'ont démontré par de nombreux rapprochements, tous les signes caractéristiques de fabrique, de style, de disposition de la légende, et de types qui distinguent l'argent de plusieurs villes de la Chalcidicé et des pays situés à l'est de cette presqu'île. Pour éviter des répétitions, je me réfère à ce qu'ont dit à ce sujet les deux auteurs cités, et je me borne à y ajouter quelques considérations qui à la fois contribueront à confirmer leur opinion et prouveront l'impossibilité d'interpréter le TPIH des monnaies, Nos. 5 à 7, de la même manière que la même inscription de la première série.

En jetant un coup d'œil sur le petit groupe de monnaies qui portent les légendes $\begin{smallmatrix} TP & PA \\ IA' & TI \end{smallmatrix}$, et $\begin{smallmatrix} VI \\ QT \end{smallmatrix}$ (TPAIAION sur les dernières émissions de bronze), provenant toutes du pays situé à l'ouest du lac Cercinitis, depuis les ruines d'Amphipolis jusqu'à la ville nommée aujourd'hui Nigrita,⁷ on sera tout de suite frappé des traits d'analogie qui ressortent de la comparaison des pièces d'argent de ce

⁷ Cousinéry, "Voyage dans la Macédoine," ii. pp. 196—199, Pl. IV. 1—5; Cadavène, Recueil, p. 93, Pl. II. 5—7. Cousinéry a cru retrouver dans la ville de Nigrita même l'ancien atelier de ces monnaies, lequel, au lieu de lui conserver le nom impropre de *Traelium*, il aurait pu, plus correctement, nommer *Τράϊλος* ou *Τραῖλον*, d'où TPAIAION, la forme de l'adjectif possessif au nominatif singulier du genre neutre, comme AINION et ΘΑΣION sur des bronzes d'Ænos et de Thasos, comme ΒΙΣΑΑΤΙΚΟΝ, etc. Plus tard, Leake (Num. Hell. Eur. Gr., p. 108), attribua les mêmes monnaies à la ville de *Τράγυλος*, dont il indique l'emplacement à l'est du lac Cercinitis, entre celui-ci et la ville de Philippi. Cependant, si même l'on pouvait admettre comme un fait incontestable l'élision du T du mot Tragilos, la proposition de Leake se trouverait en désaccord avec les données positives de Cousinéry, qui place Trailon du côté *occidental* du lac.

groupe avec celles de notre série B. Car non seulement il est prouvé que les unes et les autres proviennent des mêmes contrées, mais encore elles ont ceci en commun, qu'elles sont toutes du même module exigü⁸ et du même poids de gr. 0.46 et au dessous, que chaque groupe compte des monnaies d'argent à deux types principaux différents (l'épi et la grappe de raisin d'une part, la protomé de cheval et la tête d'Apollon de l'autre), et qu'elles présentent les mêmes variations dans la disposition de leurs légendes, et, de plus, les mêmes difficultés d'attribution locale. Une seule différence y reste à relever, c'est que le groupe marqué des inscriptions TPAI et TPAIAION comprend aussi des monnaies de cuivre, tandis que l'autre ne paraît pas en avoir eu. Mais cette différence ne peut exercer la moindre influence ni sur l'explication de la légende TPIH, ni sur le classement local des monnaies : tout au plus on en tirera la conséquence, que la ville à laquelle reviennent les pièces avec TPIH, avait cessé de monnayer quelque temps avant Trailon, dont le monnayage paraît avoir duré jusqu'à l'époque des conquêtes de Philippe II. Maintenant, si l'on ne peut songer à classer les pièces avec la légende TPAI d'une autre manière, qu'en les attribuant à une ville qui avait existé sur les lieux mêmes où on les découvre exclusivement, soit

⁸ Dans le fait, qu'on ne connaît point de pièces d'argent avec TPIH de modules plus grands, M. Gardner s'imaginait de trouver une raison affirmative pour sa proposition de "Trihémiobolion." Mais cette circonstance ne prouve absolument rien, puisque d'un grand nombre de villes il n'existe que des monnaies d'argent des plus petits modules, sur lesquelles jamais ou fort rarement on rencontre le nom local écrit en entier. La numismatique de *Trailon*, de *Mésembria*, de *Mycalessos*, de *Psophis*, de *Héraïa*, de *Cébrenia*, de *Néandria*, de *Pergamos*, etc., offre assez d'exemples de ce genre.

donc à une ville *inconnue* du nom de *Trailon* ou *Trailos*, soit encore—ce qui me paraît beaucoup moins probable à cause de l'emplacement du lieu—à *Tragilos*, il s'ensuit nécessairement que l'inscription TPIH de l'autre groupe peut se rapporter également, et avec le plus haut degré de vraisemblance, au nom d'une ville *inconnue* de l'ancienne Thrace, ou de la Chalcidicé.

Outre les monnaies de Trailon et celles dont Strober et Borrell ont parlé à la même occasion, il en existent encore d'autres, qui sous bien des rapports ressemblent aux pièces comprises dans la série B. Ainsi je ne cite que les monnaies d'*Apollonia de Thrace*⁹ avec les inscriptions $\begin{smallmatrix} \text{O} \Delta \\ \Gamma \text{A} \end{smallmatrix}$ et $\begin{smallmatrix} \Delta \text{O} \\ \text{A} \Gamma \end{smallmatrix}$, et un triobolon de *Maronée*, portant au droit une protomé de cheval tournée à gauche, et au revers la légende $\begin{smallmatrix} \text{M} \text{A} \\ \text{P} \Omega \end{smallmatrix}$, disposée dans les quatre compartiments d'un carré creux,¹⁰ exactement comme TPIH sur notre No. 5, et comme TPAI sur les monnaies de Trailon. Cette concordance de types, qui existe entre les deux pièces de Maronée et de Trie . . . , a engagé quelques numismatistes à classer l'une et l'autre à la même ville de Maronée, et à interpréter l'inscription de la dernière de la même manière que le TPIH des monnaies de Corinthe, soit comme $\tau\pi\gamma\mu\iota\omega\beta\acute{\omicron}\lambda\iota\omicron\nu$; mais il n'est pas difficile à réfuter cette nouvelle

⁹ H. P. Borrell (Num. Chron., xi. p. 57, Fig. 1 et 3) attribuait ces monnaies (des trioboles et hémibolies du système gréco-asiatique) à l'*Apollonie de la Chalcidicé*. Il me paraît cependant beaucoup plus probable qu'elles appartiennent à l'*Apollonie sur le Pont-Euxin*, qui était une colonie de Milet et à laquelle convenait par conséquent le type monétaire de la tête de lion mieux qu'à toute autre ville de la Thrace ou de la Macédoine. En outre il est à remarquer qu'une autre ville du Pont-Euxin, également d'origine milésienne, *Panticapée*, avait frappé des monnaies presque identiques avec celles dont il s'agit ici.

¹⁰ Cf. de Prokesch-Osten, *Inedita*, 1854, Pl. I. 5, gr. 1-85.

conjecture, laquelle, découlant évidemment du désir parfois outré, mais excusable, de vouloir tout expliquer d'après les traditions connues, manque de toute solidité. Je répète donc, que la dernière proposition n'est point admissible ni pour le No. 5 ni pour les autres monnaies de la série B, et voici les raisons de mon assertion.

Nous ne pouvons pas nous dissimuler que l'état actuel de nos connaissances géographiques du monde antique est fort imparfait, surtout à l'égard des pays qui n'avaient pas fait partie de la Grèce proprement dite. Nous ignorons par conséquent un grand nombre de noms locaux, et nous savons aussi, que bien des villes dont les noms nous sont conservés par des monnaies et par d'autres monuments de l'antiquité, ne sauront jamais retrouver d'emplacement certain sur nos cartes géographiques. Il est donc très-naturel de se trouver parfois dans une situation où les connaissances positives nous abandonnent, et où il nous reste à constater tout simplement d'avoir découvert le nom ou le fragment du nom d'une localité inconnue. Qu'on regarde les listes des villes tributaires d'Athènes, qui offrent tant de noms nouveaux dont on ne sait encore tirer parti pour la chorographie! Qu'on pense aux légendes des monnaies de Pélagia en Illyrie, de Méthydrion¹¹ en Thessalie, des Orresciens de Thrace, et de beaucoup d'autres villes et peuples, dont nous ne connaissons les noms que par la numismatique! Qu'on se rappelle enfin en particulier les monnaies avec l'inscription TPAI; et l'on conviendra qu'il n'y a aucune nécessité de voir dans les lettres TPIH autre chose que les

¹¹ Je publierai prochainement un article sur les monnaies et sur la position probable des villes de Méthydrion, de Damastion et de Pélagia.

initiales d'un nom de ville que nous ne retrouvons plus dans les débris de la littérature ancienne.

Quant à ce qui concerne le type du cheval, de la présence duquel on a voulu inférer que la série B appartienne à Maronée, il ne justifie aucunement, par lui seul, cette dernière attribution. La *protomé de cheval* est un de ces types monétaires qu'on rencontre partout : dans le nord de la Grèce il se trouve non seulement sur les monnaies de Maronée, mais encore sur celles de la Béotie, de la Thessalie, d'Olynthos, de Sparadocus, d'Audolcon, des rois macédoniens ; on le connaît aussi de la numismatique de Panticapée, d'Atarnée, de Cymé, de Colophon, de Termessus, de la Phénicie, de Carthage, etc. Il est clair qu'à côté de tous ces ateliers il en avait pu exister encore d'autres, tels que Trie . . . , que nous ne connaissons plus, et qui s'étaient servis du même type pour leur monnayage. En outre on peut citer bien des monnaies qui ne diffèrent les unes des autres que par la légende, comme par exemple, celles des Orresciens, de Lété et d'Æané, avec le centaure, enlevant une femme ; de la Chalcidicé et de la Botticé, de Mégare, de Mytilène, de Colophon, de Halicarnasse, avec la tête d'Apollon et la lyre ; de Parium et d'Antandros, avec une tête de femme et une chèvre ; de Scotussa, de Pheræ, et de Méthydrion, avec la protomé de cheval et un grain de blé. Pourquoi donc n'admettrait-on pas aussi des monnaies de Maronée et de Trie . . . frappées aux mêmes types ? Et comment, si encore il existait un brin de probabilité que les dernières eussent pu avoir été frappées à Maronée, comment expliquerait-on la légende ΤΡΙΗ, légende qui est invariablement la même sur toutes les variétés connues des Nos. 5 à 7, et qui jamais ne se rencontre accompagnée de quelque autre marque d'atelier ? Il n'est pas permis de considérer ce Τριη . . . comme un

nom de magistrat ou de chef de tribu, et il n'est pas possible d'y voir un indice de valeur; par conséquent on est forcé à revenir toujours à l'explication qui est résulté de toutes les considérations antérieures, c'est-à-dire, à rapporter la légende ΤΡΙΗ au nom d'une ville inconnue.

Pour se rendre compte de l'impossibilité d'une interprétation de ΤΡΙΗ par Τριημιόβολιον—jusqu'à présent je n'en ai démontré que le manque absolu de *nécessité*—il importe d'envisager la *question du poids et du système monétaire* des pièces de la série B. M. Gardner s'est permis d'en traiter d'une façon trop exclusive, en passant sous silence le poids du No. 5,¹² et en faisant supposer, sans autre raison que par hypothèse, que le poids minime des pièces à la tête d'Apollon devait s'expliquer par une dégradation de l'étalon à une époque récente. C'est cependant M. Gardner lui-même qui, manifestement à son insu, contredit clairement ce qu'il tenait à prouver par la dernière supposition; car il constate la ressemblance "*frappante*" de ces monnaies avec celles de la Chalcidicé. Or, tout le monde sait que l'émission des dernières n'avait duré que jusque vers le milieu du quatrième siècle avant J.-C., époque jusqu'à laquelle de fortes diminutions de poids (jusqu'à la moitié du poids normal dans notre cas) n'étaient point à l'ordre du jour. La ressemblance de fabrique et de style, qui frappe en effet, en comparant les Nos. 6 et 7 avec les petites monnaies d'argent de la Chalcidicé, d'Amphipolis, de Thasos, et d'autres ateliers monétaires de la même contrée, est donc précisément ce qui constitue la base

¹² C'est probablement dans le but d'assimiler cette monnaie à celles de la série A, que M. Gardner a décrit comme une protomé de *pégase*, ce qui indubitablement n'est que la partie antérieure d'un simple *cheval*.

la plus sûre pour la définition de la valeur des premières. Ainsi nous connaissons des monnaies d'argent de la *Chalcidicé* du poids de gr. 0·32 (tête d'Apollon, *Rev.*, XAAKI, trépied, 2 exemplaires), d'*Eion*? de gr. 0·36 et 0·35 (H et deux cygnes, *Rev.*, carré creux, 2 ex.), d'*Amphipolis*, de gr. 0·47 à 0·42 (tête d'Apollon, *Rev.*, AMΦI, dauphin, 9 ex., et 1 ex. isolé de gr. 0·55, ayant sans doute du surpoids), de *Thasos* de gr. 0·47 à 0·35 (tête de Silène, *Rev.*, ΘΑΣI, deux dauphins, 10 ex., et tête de femme ou d'Apollon, *Rev.*, ΘΑΣI et un dauphin, 2 ex.), de *Mésembria*, de gr. 0·32 (casque, *Rev.*, META, 1 ex.), etc.

Les poids des monnaies de *Trailon* varient de gr. 0·42 à 0·38, ceux de *Trie* . . . de gr. 0·46 à 0·36.¹³ Toutes ces monnaies, frappées à peu près à la même époque, représentent des fractions du statère ou tétradrachme du système gréco-asiatique, dont les pièces d'émission thrace et macédonienne pèsent le plus généralement gr. 14·50 (*Chalcidicé*, *Amphipolis*, *Acanthus*, *Maroncia*, *Philippe II.*), et n'excèdent ce chiffre que par exception jusqu'à gr. 15, et au-delà (*Abdère*, *Thasos*). En prenant ainsi pour base le poids de gr. 14·50, on obtient une *drachme* de gr. 3·63 et un *trihémiobolion* de gr. 0·91. De l'autre côté nous avons trouvé que les petites fractions de drachme, pour lesquelles nous avons à chercher la dénomination de valeur, pèsent de gr. 0·47 à 0·32, et celles de *Trailon* et de *Trie* . . . en particulier, de gr. 0·46 à 0·36. En tenant compte de l'état de conservation plus ou moins satisfaisant, et de la taille plus ou moins exacte de ces pièces, on arrive facile-

¹³ Cf. les poids des Nos. 5 à 7. Les Nos. 19, 20, et 21 du Cabinet de Munich (Streber, l.c.), pèsent gr. 0·42—0·45, et 0·36; d'autres exemplaires (Borrell) gr. 0·46 à 0·39; une pièce de belle conservation, du Cab. de Berlin, gr. 0·47.

ment à en fixer le poids normal par le chiffre de gr. 0·45. Ce poids représentant la valeur exacte d'un *tritémorion* du système gréco-asiatique, soit donc la moitié d'un *trihémiobolion*, il est évident que le ΤΡΙΗ des pièces de la série B ne peut pas être pris pour un indice de valeur. Nous obtiendrions le même résultat en appliquant nos calculs à tout autre système monétaire grec ; et comme il est inutile de prouver en détail cette assertion, il nous suffira de dire, que par exemple d'après le système corinthien, dont la drachme est une des plus faibles, nos pièces représenteraient tout au plus des oboles, et non pas des trihémiobolies. Tout bien examiné, les monnaies de la série B ne peuvent donc appartenir ni à Corinthe, ni à Maronée ; elles forment un groupe à part et ont été frappées par une ville de la Thrace ou de la Chalcidicé, dont aucune tradition et aucun monument ne nous ont transmis le nom complet, et dont la numismatique seule nous a conservé un faible souvenir. Tout ce qui tend à dépasser ce résultat, sera à taxer de simple conjecture, tant que de nouvelles découvertes ne nous auront pas procuré des renseignements plus positifs. Et dans ce sens, faute de mieux, je propose finalement le classement des monnaies Nos. 5 à 7 à une localité du nom de *Trieros* (?).

Il est hautement à regretter, qu'à l'égard des lieux de provenance de ces monnaies nous ne possédions pas des informations de la précision de celles, que nous devons à Cousinéry par rapport aux monnaies de Trailon, et qu'ainsi nous nous trouvions hors d'état de signaler la position approximative de l'atelier auquel on doit l'émission des premières. Dans ces circonstances ma proposition du nom de "*Trieros*" ne peut avoir, à vrai dire, qu'un but de convenance, celui de donner une désinence

au mot *Τριη* . . . , sans préjuger la question d'aucune façon. Elle peut se fonder aussi, si l'on veut, sur la supposition, que les noms des *Τριήρες* et des *Τρήρες* étaient identiques,¹⁴ d'où il s'ensuivrait que le pays nommé *Τρήρος* (Et. de Byz.) s'écrivait aussi *Τριήρος*. D'après un passage de Strabon, I. 59—assez peu clair, il est vrai—il résulterait qu'une tribu des Trières se fût établie autour du lac Bistonis, entre Maronée et Abdère, et que plusieurs de leur villes eussent été englouties par les eaux de ce lac : l'une des villes submergées, ou le territoire occupé par les Trières avant la catastrophe rapportée par Strabon, aurait pu porter le nom de *Τριήρος*. Mais avec tout cela nous n'arriverons jamais à la solution définitive de la question, et au lieu de poursuivre quelques indices incertains et de m'épuiser en de vains raisonnements sur les conjectures en résultant, il me paraît plus opportun d'arrêter ici les recherches sur l'origine des monnaies portant l'inscription ΤΡΙΗ, et de répéter, *qu'elles forment deux séries bien distinctes, dont l'une revient aux ateliers de Corinthe et de Leucas, et l'autre à une ville inconnue, située quelque part entre la Chalcidice et Maronée, et appelée peut-être autrefois Trieros.*

F. IMHOOF-BLUMER.

WINTERTHUR, Janvier, 1873.

¹⁴ Cette opinion n'est point nouvelle et est exprimée dans une note de Meinecke dans son édition d'Etienne de Byzance : "*Τριήρες* non diversi a *Tretribus*." Cf. Millingen, *Sylloge*, p. 41.

II.

LIST OF UNEDITED GREEK COINS.

COPPER.

THE coins contained in the present list comprise part of a collection of a celebrated connoisseur, which has been placed in my hands to arrange for public sale during this season.

I have found in the "Imperial Greek Series" a vast number of hitherto unknown types of considerable interest and value to numismatic science, and I think that the members of the Society will agree with me that these important medalllic monuments should be published in their Chronicle.

I therefore send an accurate descriptive list of the coins.

MOESIA INFERIOR.

MARCIANOPOLIS. Caracalla and Julia Domna, S. 7½.

Obv.—ANTONINOC . AYTOYCTOC . IOYAIA . ΔOMNA.
Laureated head of Caracalla facing that of Domna.

Rev.—YII . [KYN]TIAIANOY . MAPKIANO[HOAITON].
Æsculapius standing; in the field Ε.

———— Elagabalus, S. 7

Obv.—AYT . K . M . AYPHAI . ANTONCINOC. . Lau-
reated head to right.

Rev.—YII . IYA . ANT . CEAEYKOY . M[AP *mon.*]KIANO-
HOAIT[ON *mon.*] . Nude Mercury standing, holding
a bag in his right hand, and caduceus in his left.

MARCIANOPOLIS. Elagabalus, *S.* 7.

Obv.—Legend and head as before.

Rev.—Legend as before. Hygieia standing, feeding a serpent.

NICOPOLIS. Macrinus, *S.* 7.

Obv.—ΑΥΤ . Κ . Μ . ΟΠΕΛ . ΣΕΥΗ . ΜΑΚΡΙΝΟΣ.
Laureated head to right.

Rev.—ΥΠ . Κ . ΑΓΡΙΠΠΑ . ΝΙΚΟΠΟΛΙΤΩΝ . ΠΡΟΣ .
ΙΟΤΡΩΝ. Hercules standing; his right hand resting
on his club, in his left a bow and lion's skin.

———— Macrinus, *S.* 6.

Obv.—Legend and head as before.

Rev.—ΥΠ . ΟΤΑ . ΔΟΝΤΙΝΟΥ . ΝΙΚΟΠΟΛΙΤΩΝ. Nudo
Bacchus standing, supporting a thyrsus in his left
hand, and pouring out wine with his right.

———— Julia Domna, *S.* 7.

Obv.—ΙΟΥΛΙΑ . ΔΟΜΝΑ . ΣΕΒΑ. Head of Domna to
right.

Rev.—ΥΠ . Α . ΑΥΡ . ΓΑΛΛΟΥ . ΝΙΚΟΠΟΛΕΙΤΩΝ .
ΠΡΟΣ . ΙΟΤΡΩΝ. Severus performing a sacrifice;
in front, an altar; behind, ears of corn and poppies.

———— Elagabalus, *S.* 7.

Obv.—ΑΥ . Κ . Μ . ΑΥΡΗ . ΑΝΤΩΝΙΝΟΣ. Laureated
head to right.

Rev.—ΥΠ . ΝΟΒΙΟΥ . ΡΟΥΦΟΥ . ΝΙΚΟΠΟΛΙΤΩΝ . Π .
Ι . ΕΙ. Jupiter seated to left, holding a patera and
a hasta.

———— Elagabalus, *S.* 7.

Obv.—ΑΥΤ . Μ . ΑΥΡ . ΑΝΤΩΝΕΙΝΟΣ. Laureated bust
to right, with the *paludamentum*.

Rev.—ΥΠ . ΝΟΒΙΟΥ . ΡΟΥΦΟΥ . ΝΙΚΟΠΟΛΙΤΩΝ . ΠΡΟΣ .
ΙΟΤΡΩΝ. Bacchus standing, holding a patera or
drinking-cup in his right hand, and with a branch in
his left.

TOMI. Marcus Aurelius, *S.* 5½.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡ . ΑΝΤΩΝΕΙΝΟΣ. Laureated
head to right.

Rev.—ΜΗΤΡΟ . ΠΟΝΤΟΥ . ΤΟΜΕΩΣ. Bacchus standing,
holding a patera in his right hand, and with his
left placed on his head; at his feet a tiger.

TOMI. Crispina, S. 5.

Obv.—KPICHHINA . C TH. Head to right.

Rev.—MHTPO . ΠΟΝΤΟΥ . ΤΟΜΕΝΟ. Minerva standing with her usual attributes.

THRACIA.

ANCHIALUS. Severus, S. 7.

Obv.—ΑΥ—CΕΥΗΡΟC. Laureated bust to right, with *paludamentum*.

Rev.—ΟΥΑΠΙΑΝΩΝ . ΑΡΧΙΑΛΕΩΝ. Coiled serpent.

———— Maximinus, S. 6½.

Obv.—ΑΥΤ . ΜΑΞΙΜΕΙΝΟC . ΕΥΕΕΒΗC. Laureated bust to right, with *paludamentum*.

Rev.—ΟΥΑΠΙΑΝΩΝ . ΑΡΧΙΑΛΕ[ΩΝ *mon. in field.*] Hector standing, armed with spear and shield.

BYZANTIUM. Severus Alexander, S. 9.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡΗ . CΕΥ . ΑΛΕΞΑΝΔΡΟC . ΑΥ. Laureated head to right.

Rev.—ΕΠ . ΦΡΟΝΤΩΝΟC . ΦΗΘΗC . ΒΥΖΑΝΤΙΩΝ. Victory standing, front view, holding a wreath and palm.

MARONEA. Trebonianus Gallus, S. 7½.

Obv.—ΑΥΤ . ΒΙΒ . ΓΑΛΛΟC. Laureated head to right.

Rev.—ΜΑΡΩΝΕΙΤΩΝ. Bacchus standing, holding a bunch of grapes in his right hand, and in his left two arrows or short spears.

ODESSUS. Gordian and Tranquillina, S. 7.

Obv.—ΑΥΤ . Κ . Μ . ΑΝΤ . ΓΟΡΔΙΑΝΟC . ΑΥΤ . CΑ . ΤΡΑΝΚΥΛΛΑΙ . . Heads of Gordian and Tranquillina facing.

Rev.—ΟΔΗCΘΕΙΤΩΝ. Female standing, holding a wreath and a hasta; in the field Ε.

PAUTALIA. Julia Domna, S. 5.

Obv.—ΙΟΥΑΙΑ . ΔΟΜΝΑ . CΕΒ. Head of Domna to right.

Rev.—ΟΥΑΠΙΑC . ΠΑΥΤΑΛΙΑC. Diana with bow to right,

PAUTALIA. Julia Domna, S. 6.

Obv.—ΙΟΥΛΙΑ . ΔΟΜΝΑ . ΣΕΒΑ. Head of Domna to right.

Rev.—ΠΑΥΤΑΛΙΩΤΩΝ. Nemesis standing to left, holding in her left arm a scourge; at her feet, a wheel.

———— Geta, S. 8.

Obv.—ΑΥ . Κ . Π . ΣΕ . ΓΕΤΑΣ. Laureated head to right.

Rev.—ΟΥΑΝΙΑΣ . ΠΑΥΤΑΛΙΑΣ. Victory walking to left, with palm and wreath.

PERINTHUS. Severus, S. 8.

Obv.—ΑΥ . ΚΑ . ΣΕΠΤΙ . ΣΕΥΗΡΟΣ . ΠΕ. Laureated head to right.

Rev.—ΠΕΡΙΝΘΙΩΝ . ΝΕΩΚΟΡΩΝ. Female standing, holding a cornucopix in her left hand, and a putera in her right.

PHILIPPOLIS. Elagabalus, S. 9.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡΗΛ . ΑΝΤΩΝΕΙΝΟΣ. Laureated head to right.

Rev.—ΜΗΤΡΟΠΟΛΕΩΣ . ΦΙΛΙΠΠΟΠΟΛΕΩΣ . [NE mon.]
ΩΚΟΡΟΥ. Female seated on a rock, and holding in her right hand a bunch of corn and poppies, at her feet a river god?

SERDICA. Caracalla, S. 8½.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡ . ΣΕΥΗ . ΑΝΤΩΝΕΙΝΟΣ. Radiated head to right.

Rev.—ΟΥΑΝΙΑΣ . ΣΕΡΔΙΚΗΣ. Emperor standing, holding a victory and hasta.

———— Geta, S. 8½.

Obv.—ΑΥΤ . Κ . Π . ΣΕΠΤΙ . ΓΕΤΑΣ. Laureated bust to right.

Rev.—ΟΥΑΝΙΑΣ . ΣΕΡΔΙΚΗΣ. Jupiter seated, holding a Victory and hasta.

TOPIRUS. Caracalla, S. 6.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡ . ΑΝΤΩΝΙΝΟ. Laureated head to right, countermarked on the shoulder with M.A.P. in mon.

Rev.—ΟΥΑΝΙΑΣ . ΤΟΜΙΡΟΥ. Hercules seated on the lion's skin, and resting his right hand on the club.

TRAJANOPOLIS. Caracalla S. 8.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡΗ . ΑΝΤΩΝΕΙΝΟΟ. Laureated head to right.

Rev.—ΤΡΑΙΑΝΟΗΘΑΕΙΤΩΝ. Pallas standing.

———— Caracalla, S. 8.

Obv.—ΑΥΤ . Κ . Μ . ΑΥΡΗΑ . ΑΝΤΩΝΙΝΟΟ. Laureated head to right.

Rev.—ΤΡΑΙΑΝΗΘ . ΑΥΤΟΥΘΗΘ. Eagle with wreath in its beak, and standing on an ornamented altar, between two military standards.

THESSALIA.

THESSALIA (*in genere.*) Antoninus Pius, S. 4½.

Obv.— ΑΝΤΩΝΙΝΟΟ. Laureated head to right.

Rev.—ΘΑΚΚΑΑΩ Female standing, holding a spear in her right hand, and in her left the aplustre; at her feet a bird.

———— Caracalla, S. 5.

Obv.— ΑΝΤΩΝΙΝΟΟ. Laureated head to right.

Rev.—ΘΕΚΚΑΑΩΝ Pallas standing to right.

ACHAIA.

CORINTH. Hadrian, S. 4½.

Obv.—Laureated head to right, with cuirass.

Rev.—ΚΛ . . ΙΥΛ . ΚΟΡ. Æsculapius standing.

LACONIA.

LACEDÆMON. Geta, S. 6.

Obv.— . . ΕΝΤ . ΓΕΤΑ. Bare head to right.

Rev.—ΛΑΚΕΔΑΙΜΟΝΙΩΝ. Male figure seated on a cube to left, looking behind; in field AE *mon.* and Δ.

ARCADIA.

PHIALEA. Plautilla, S. 5.

Obv.—ΠΛΑΥΤΙΑΛΛΑ . ΚΕΒΑΟΤ. Head to right.

Rev.—ΦΙΑΛΕΩΝ. Pallas standing to left, with hasta and patera.

PONTUS.

AMASIA. M. Aurelius, S. 9½.

Obv.—ΑΥΤ . ΚΑΙΟ . Μ . ΑΥΡ . ΑΝΤΩΝΙΝ Laureated head to right.

Rev.—ΑΔΡ . ΑΜΑΟ . ΝΕΟΚ . Κ . ΜΗΤ . Κ . ΗΡΩ . ΗΟΝ .
ΕΤ . ΠΠΘ = *year* 189. Aurelius and Vorus standing, togated, and taking each other by the right hand.

AMISUS. Gordian III., S. 10.

Obv.—Laureated head to right with *paludamentum*.

Rev.—ΑΜΙΟΟΥ . ΕΛΕΥΘΕΡΑΟ . ΕΤΟΥΟ . ΟΗ = *year* 278.
Hercules standing, front view, looking to his right.

NEOCESAREA. Sev. Alexander, S. 7½.

Obv.—ΑΥ . Κ . Μ . ΑΥ . ΟΕ . ΑΛΕΞΑΝΔΡΟΟ . Laureated head to right, with *paludamentum*.

Rev.—ΚΟΙ . ΗΟ . ΝΕΟ — ΕΤ . ΡΟΑ = *year* 171. Table, on which are two urns with a palm in each; below, a vase containing two palms; at the sides of table two palms.

———— Sab. Tranquillina, S. 7½.

Obv.—ΟΑΒ . ΤΡΑΝΚΥΑΙΝΑ . ΟΕΒ. Head of the empress to right, wearing a necklace.

Rev.—ΜΗΤΡ . ΝΕΟΚΑΙΟΑΡΙΑ . ΕΤ . ΡΟΗ = *year* 178.
Square table, on which is inscribed ΑΚΤΙΑ; above, an urn containing a palm.

TRAPEZUS. Julia Mamaea, S. 7½.

Obv.— ———. Head to right.

Rev.—ΤΡΑΠΕΖΟΥΝΤΙΟΝ. Fortune standing.

———— Philip, sen., S. 8.

Obv.—ΑΥ . Κ . Μ . ΙΟΥ . ΦΙΑΠΠΟ Young head to right.

Rev.—ΤΡΑΠΕΖΟΥΝΤΙΩΝ . ΕΤ . ΑΠΡ = *year* 181. Turreted head to right.

ZELA. Severus, S. 7½.

Obv.—ΑΥΤ . ΚΑΙ . Α . ΟΕΠΤ . ΟΕΟΥΗΡΟΟ . Laureated head to right.

Rev.—ΖΗΛΙΤΩΝ . ΤΟΥ . ΗΟΝ . ΕΤ . ΡΜΓ = *year* 143. Hexa-style temple of Anaitis (a Persian divinity much worshipped in Zela) with slanting roof.

ZELA. Julia Domna, *S.* 7.

Obv.— . . ΔΙΑ . ΔΟ Head to right.

Rev.—ΖΗΑΙΤ . . ΠΟΝΤΟΥ . ΕΤ . PMB=*year* 142. Hexa-style temple with slanting roof.

* * The date being so clear, shows the correctness of Sestini in discovering the numeral B to complete the year, which neither Pellerin nor Mionnet were able to trace.

BITHYNIA.

BITHYNIA (*in genere*). Vespasian, *S.* 9.

Obv.—ΑΥΤΟΚΡ . ΚΑΙΣΑΡ . ΣΕΒΑΣ . ΟΥΕΣΠΑΣΙΑΝΟΣ.
Laureated head to right.

Rev.—ΕΠΙ . Μ . ΣΑΛΟΥ . ΙΑΗΝΟΥ . ΑΣΙΠΗΝΑ . ΑΝΘΥ-
ΠΑΤΟΣ, and across the field ΒΙΘΥΝΙΑ. Female
seated to left, with cornucopiæ and patera.

ΑΡΑΜΕΑ. Severus, *S.* 9.

Obv.—IMP . CAE . L . SEPT . SEV . PER . AVG. Lau-
reated head to right.

Rev.—COL . IVL . CONC . AVG . APAM . D . D . in four
lines within a wreath.

CIVS. Tranquillina, *S.* 4.

Obv.—CAB . TPANKYAAENA. Bust to right.

Rev.—ΚΙΑΝΩΝ. Cupid standing to right, in a cross-legged
position, and resting on an inverted torch.

HADRIANI. Severus, *S.* 5.

Obv.—ΑΥ . ΚΑ . CΕΠΙ . CΕΥΗ . . Laureated head to right,
with the *paludamentum*.

Rev.—ΑΔΡΙΑΝΟΝ . CΕΒΑ. Fortune standing.

———— Julia Mamaea, *S.* 6.

Obv.—ΙΟΥΔΙΑΝ . ΜΑΜΑΙΑΝ. Head to right.

Rev.—ΑΔΡΙΑΝΟΝ. Fortune standing.

———— Elagabalus, *S.* 5.

Obv.—ΑΥ . Κ . Μ . Α . ΑΝΤ. Young head, laureated, to
right.

Rev.— . . ΑΔΡΙΑΝΟΝ. Fortune standing.

HADRIANOTHEBÆ. Lucius Verus, *S.* 2.

Obv.— ——— Head to right.

Rev.—ΑΔΡΙΑΝΟΘΗΡΙΑΝ. Helmet on the top of a cuirass.

HERACLEA. Julia Domna, S. 7½.

Obv.—IOYAIΑ . ΔOMNA . AY. Head to right.

Rev.—CEBACT . HPAKΛEO. Hercules standing in the alcove of a temple, with a tetrastyle portico on each side.

JULIOPOLIS. Commodus, S. 5½.

Obv.—A . K . AA . AY . KO . HPAKIΩ. Laureated head to right.

Rev.—IOYAIΩHOΔEITΩN. Æsculapius standing.

NIGÆA. Nero, S. 8.

Obv.—NEPΩN . KAAΥΔIOΣ . KAIZAP . ΣEBACTOΣ . ΓEPMANIKOΣ. Laureated head to left.

Rev.—E . M . TAPKYITIOY . HPEICKOY . ΠATPONOΣ . ANΘ. An altar, on which is inscribed NEIKAIE; above, a thyrsus, cornucopiæ, wreath, capricorn, and globe.

————— Nero, S. 5.

Obv.—NEPΩN ——. Bare head to left, with the lituus in front.

Rev.—M . TAPKYITIOY . HPEICKOΣ . ΠATPΩN. Two trophies with a cuirass between them; below, NEIK.

————— Severus, S. 8.

Obv.— . . K . A . CEΠTI . CEY Laureated head to right, a Victory in countermark behind.

Rev.—NIKAIEΩN (*exergue*). Eagle standing on a base, with a wreath in its beak; on each side a standard.

————— Severus, S. 3.

Obv.—A . K . CEΠ . CEYH . . . Bare head to right.

Rev.—NIKAIEΩN. Staff of Æsculapius.

————— Caracalla, S. 7½.

Obv.—M . AYPHA . ANTΩNINOC. Bare head to right, with *paludamentum*; in front, a large E in countermark.

Rev.—NIKAIEΩN. Female seated on a rock, holding two ears of corn, at her feet a river god.

————— Caracalla, S. 7.

Obv.—M . AY . . . ANTΩNINOC . KAIZAP. Bare head to right.

Rev.—NIKAIEΩN. Fortune standing.

NICÆA. Maximinus, S. 6.

Obv.— ———INOC. Head to right.

Rev.—NIKAIEON—[BY]ΣANTINON. Marine implements, possibly fishing-nets.

————— Trebonianus Gallus, S. 6.

Obv.—AYT . TPEIB (*sic.*) TAAAOO . AY. Radiated head to right.

Rev.—NIKAIEON. Diana and hound.

NICOMEDIA. Julia Mamaea, S. 6.

Obv.—IOYAI . MAMAIA . AYT. Head to right.

Rev.—NIKO[MH *mon.*]ΔE[ON *mon.*] ΔIC . NEOKOP. Mercury walking to left.

PRUSA AD OLYMPUM. Diadumenian, S. 5.

Obv.—M . OPEA . — ΔIA ——. Bare head to right.

Rev.—IΠOYOC—. Bacchus standing, at his feet a tiger.

PRUSIA AD HYPYUM. Gordian III., S. 8.

Obv.—M . ANT . ΓOPAIANOC . A[YT *mon.*] Radiated head to right; in front, a head in countermark.

Rev.—ΠPOYCIΕON . IΠOC . YIIIΩ. Head of the river-god Hypius to right.

MYSIA.

APOLLONIA. Antoninus Pius, S. 7.

Obv.—AY . KAI . TI . AIA . . . ANTΩNEINOC. Laureated head to right.

Rev.—AΠOAAΩNIA— . —OC . ΠYN. Æsculapius standing.

CYZICUS. Gordian III., S. 9½.

Obv.—A . K . M . ANT . ΓOPAIANOC. Large head, laureated, to right.

Rev.—CTPA . EΠIΔOY . KYZIKHN[ON *mon.*] NEOKOPON. Fortune standing.

————— Julia Domna, S. 8.

Obv.—IOYAI . CEBACTH. Head to right.

Rev.—KYZIKHNON . NEOKOP. Diana Lucifera in a biga to right.

GERME. Julia Domna, S. 6.

Obv.—IOYAIA . CEBACTH. Head to right.

Rev.—CTP . TAYKONOC . ΓEPMHNQN. Jupiter seated to left, holding a patera in his right hand, and in his left a hasta.

——— Gordian III., S. 4.

Obv.—AY . K . M . ANT . TOPAIANOC. Laureated head to right, with *paludamentum*.

Rev.—ΓEPMHNQN. Hercules standing, with club and lion's skin.

PCEMANENI. Julia Domna, S. 6.

Obv.—IOYA . ΔOMNA . CEBACT. Head to right.

Rev.—ΠOIMANHNQN. The serpent of Æsculapius entwined around a tripod.

TROAS.

ABYDUS. Sev. Alexander, S. 5.

Obv.—AY . K . M . AΛEΞANΔPO. Laureated head to right, with *paludamentum*.

Rev.—ABYΔHNQN. Temple.

IONIA.

EPHESUS. Caracalla, S. 10.

Obv.—AY . K . M . AYP . ANTONCINOC. Laureated bust to right, with cuirass and *paludamentum*.

Rev.—EΦECION . TPIC . NEOKOPQN . KAI . THIC . APTEMIAOC. Ephesian Artemis standing between equestrian figures of Caracalla and Geta.

CHIOS, *Insula*. Philip, sen., S. 9½.

Obv.—A . K . MAP . IOY . ΦIAIHHOC. Laureated bust to right, with *paludamentum*.

Rev.—XION . EPYΘPAION . OMONOIA . KAIHTO-
ΛEINOY. Pallas and Ceres standing, each holding a hasta, and in the right hand of Ceres are two ears of corn.

* * A very interesting coin, illustrating an alliance between Chios and Erythræ.

SMYRNA. Gallienus, S. 7.

Obv.—ΑΥΤ . Κ . ΠΟΛΙ . ΛΙΚ . ΓΑΛΛΙΗΝΟC. Laureated head to right, the bust paludated.

Rev.—ΕΠ . Ο . ΟΜΥΡΝΑΙΩΝ . Γ . ΝΕΩΚΟΡΩΝ . ΙΙΙΠΙ-
ΚΟΥ . ΦΙΛΗΤΟΥ. Turreted Amazon standing.

TEOS. Gallienus, S. 6.

Obv.—ΑΥΤ . Κ . ΠΟ . ΛΙΚ . ΓΑΛΛΙΗΝΟC. Laureated bust to right.

Rev.—ΟΤ . ΟΕΣ . ΛΟΥΚΙΟΥ . ΘΗΩΝ. Female seated to left.

———— Gallienus, S. 7.

Obv.—ΑΥ . ΚΑΙ . ΛΙΚ . ΓΑΛΛΙΗΝΟC. Laureated bust to right.

Rev.—ΕΠΙ . ΟΤΡΑ . ΚΑΔ . ΝΕΙΚΗΦΟΡΟΥ . ΘΗΩΝ. Fortune standing to left.

CARIA.

ANTIOCHIA. Gallienus, S. 9.

Obv.—ΑΥ . Κ . ΠΟ . ΛΙΚ . ———ΟC. Helmeted bust to left, with javelin and buckler.

Rev.—ΑΝ——ΕΩΝ. Semi-draped figure seated; in front, an urn on a table; underneath, a diota.

APOLLONIA. Faustina, jun., S. 8.

Obv.—ΦΑΥCΤΕΙΝΑ . CΕΒΑCΘΗ. Bust to right.

Rev.—ΑΠΟΛΛΩΝΙΑΤΩΝ. Neptune standing, holding a dolphin in each hand.

APHRODISIAS. Julia Domna, S. 8.

Obv.—ΙΟΥΛΙΑ . ΔΟ . . . Head to right.

Rev.—ΑΦΡΟΔΕΙCΙΕΩΝ. Venus Aphrodite standing to right; modius on her head, at her feet a cupid and a vase of flowers.

PAMPHYLIA.

ASPENDUS. Gordian III., S. 8.

Obv.—ΑΥΤ . Κ . Μ . ΑΝΤ . ΓΟΡΔΙΑΝΟC . CΕΒ. Laureated head to right.

Rev.—ΑCΠΕΝΔΙΩΝ, in the field Α. Female figure seated, holding in her left hand a cornucopiæ, and in her right two statues of Diana Perga.

ASPENDUS. Gordian III., *S.* 8½.

Obv.—ΑΥΤ . Κ . Μ . ΑΝΤ . ΓΟΡΔΙΑΝΟC . CЄB. Laureated head to right, with an eagle in countermark on the neck.

Rev.—ΑCΠЄΝΔΙΩ . and, within a wreath, ΘЄΜΙΔΟC . ΤΟ . Β.

———— Philip, sen., *S.* 8½.

Obv.—ΑΥ . Κ . Μ . ΙΟΥΛ . ΦΙΛΙΠΠΟC . CЄB. Laureated bust to right.

Rev.—ΑCΠЄΝΔΙΩΝ. Pluto seated to left, at his feet Cerberus.

PERGA. Vespasian, *S.* 4½.

Obv.—ΟΥЄΠΙΑCΙΑΝΟC . ΚΑΙCΑΡ. Laureated head to left.

Rev.—ΠЄΡΤΑΙΑC . ΑΡΤЄΜΙΔΟC. Diana walking to right, holding a bow in her left hand, and an arrow in her right; at her feet a stag.

SIDE. Domitian, *S.* 6.

Obv.—ΔΟΜΙΤΙΑΝΟC . ΚΑΙ . ΓЄΡΜΑΝΙΚΟC. Laureated head to right.

Rev.—CΙΑΗΤΩΝ. Emperor standing, holding a spear in his left hand, and in his right a pomegranate; at his feet a branch.

———— Philip, sen., *S.* 9.

Obv.—ΑΥ . Κ . Μ . ΙΟΥΛ . ΦΙΛΙΠΠΟC . CЄB. Laureated head to right; below, Є.

Rev.—Large urn on a table, on which is inscribed CΙΑΗΤΩΝ; underneath, a diota and a palm.

———— Valerian, sen., *S.* 9.

Obv.—ΑΥΤ . Κ . ΠΟ . ΛΙΚ . ΟΥΑΛЄΡΙΑΝΟΝ . CЄ. Laureated head to right.

Rev.—CΙΑΗΤΩΝ. Figure standing, with patera and hasta.

———— Gallienus, *S.* 8.

Obv.—ΑΥΤ . ΚΑΙ . ΠΟΥ . ΑΙ . ЄΓΝ . ΓΑΛΛΙΗΝΟC . CЄΒΑ. Radiated head to right, with the *paludamentum*; in the field, I.

Rev.—CΙΑΗΤΩΝ, and, within a wreath, ΝЄΩΚΟΡΩΝ, arranged in three lines.

SILLYUM. Philip, sen., S. 6.

Obv.—ΑΥ . Κ . Μ . ΙΟΥ . ΚΕΟΥ . ΦΙΛΙΠΠΟΥ . Ο.
Laureated bust to right.

Rev.—ΟΙΑΛΥΕΩΝ. Head of Lunus to right, wearing the Phrygian hat.

PISIDIA.

ANTIOCHIA. Severus, S. 5½.

Obv.—L . SEPT . SEV . PERT . AVG . IMP . XI. Radiated head to right.

Rev.—COLONIAE . ANTIOCH . FORTVNA. Fortune standing with her attributes.

———— Severus, S. 10.

Obv.—L . SEPT . SEV . PERT . AVG . IMP . P . P.
Laureated head to right.

Rev.—GENIVS . COL . ANTIOCH . S . R. Genius of Antioch standing, holding a cornucopiæ and branch.

———— Gordian III., S. 8.

Rev.—COL . CAES . ANTIOCH . FORTVNA. Fortune standing before an altar, with patera and hasta.

———— Gordian III., S. 10.

Obv.—IMP . CAESAR . ANT . GORDIANVS . AVG. Laureated head to right, with *paludamentum*.

Rev.—COL . CAES . ANTIOCH . S . R. Emperor in quadriga holding the Roman eagle.

ISAURIA.

CARALLIA. Caracalla, S. 5.

Obv.—ΑΥ mon. Κ . Μ ΑΝΤΩΝ Laureated head to right, with *paludamentum*.

Rev.—ΚΑΡΑΛΙΩΤΩΝ. Lunus standing to right, holding a long flaming torch.

CILICIA.

ADANA. Volusian, S. 7.

Obv.—ΑΥΤ . Κ . ΤΡΑΦ . ΓΑΛΛ ΟΥΟΛΟCCΙΑΝΟΥ.
Radiated head to right.

Rev.—ΑΔΡ . ΑΔΑΝΕΩΝ . ΟΙΚ . ΔΙΟ. Mercury standing, holding a caduceus in his left hand, and in his right two palms; in front of him a table, on which is an urn containing palms.

ÆGAE. Diadumenian, *S.* 7½.

Obv.—Μ . ΟΗΕΛ . ΑΝΤΩΝΕΙΝΟC. Bare head to right, with *paludamentum*.

Rev.—ΜΑΚΡΙΝΟΥ . Π . ΑΙΓ . Μ . ΕΥΠ . . . Galley to right.

ANAZARBUS. Domitian, *S.* 5.

Obv.—Δ . . . ΤΙΑΝΟC . ΓΕΡ——. Laureated head to right.

Rev.—ΚΑΙCΑΡΕΩΝ . . . ΖΑΡΒΩ . ΕΤΟΥC . ΙΡ=year 110. Hope walking to left.

—— Domitian, *S.* 7.

Obv.—ΔΟΜΙΤΙΑΝΟC . ——. Laureated head to right.

Rev.—ΚΑΙCΑΡΕΩΝ . ΑΝΑΖΑΡΒΩΝ . ΕΡ=year 105. Female head, turreted and veiled, to right.

—— Domitian and Domitia, *S.* 11.

Obv.—ΔΟΜΗΤΙΑΝΟC ——. Laureated head of Emperor to right.

Rev.—ΚΑΙCΑΡΕΩΝ . ΑΝΑ—— ΜΗΤΙΑ . ΣΕΒΑΣΤΗ . ΕΤΟΥC . ΕΡ=year 105. Head of the Empress to left.

—— Caracalla, *S.* 7.

Obv.—ΑΥ . Κ . Μ . ΑΥ . ΑΝΤΩΝΕΙΝΟC. Laureated head to right, with *paludamentum*.

Rev.—ΠΡΟCΟΙΚΟΥ——ΝΙΚΟ——ΑΝΑΖΑΡΒΩΥ . Α . Μ . Κ . An urn on a table.

—— Severus Alexander, *S.* 9.

Obv.—ΑΛΕΞΑΝΔΡΟC. Laureated head to right.

Rev.—ΑΝΑΖΑΡΒΩΥ . ΜΗΤΡΟΠΟΛ . ΕΤ . ΘΜC=year 249. Draped female holding a bipennis, and standing by the side of an ox.

—— Maximus, *S.* 9.

Obv.——ΜΑΞΙΜΟC——. Bare head to right.

Rev.—ΑΝΑΖΑΡΒΩΥ . ΜΗΤΡΟΠΟΛΕΩC . ΕΤ . ΔΝC=year 254. Figure seated in a tetrastyle temple.

ANAZARBUS. Tranquillina, S. 9.

Obv.—CABEINIA . TPANKYAAEINA . AYT. Head to right.

Rev.—ANAZAPBOY . ENAO . MHTPO . T . B . ET.—? Pallas standing to left.

———— Etruscus, S. 7.

Obv.—MEC . ΔEKIOC——. Bare head to right.

Rev.—ANAZAPBOY . MHTPON . ET . HEC=year 268. River-god to left.

AUGUSTA. Tiberius and Julia, S. 7.

Obv.—TI . CAE——ΣΕΒΑΣΤΟΥ . ΥΙΟΣ . ΣΕ——. Bare head to right.

Rev.—ΑΥΤΟΥΣΤΑΝΩΝ . ΙΟΥΛΙΑ . ΣΕΒΑΣΤΗ. Head of Julia to right.

———— Lucilla, S. 7.

Obv.———ΔΟΥΚΙΑ———. Bust to right.

Rev.—ΑΥΤΟΥΣΤΑΝΩΝ . ΕΤΟΥΟ . ΑΝΡ=year 151. Fortune standing with her attributes.

CELENDERIS. Otacilia, S. 6.

Obv.—OTAKIAIA . CEΟΥΗΡΑ . CE. Bust to right.

Rev.—ΚΕΛΕΝΔΕΡΙΤΩΝ. Head of Pallas to right.

———— Trajanus Decius, S. 7.

Obv.—ΑΥ . ΚΑΙ . ΚΥ . ΔΕΚΚΙΟΝ . ΤΡΑΕΙΑΝΟC. Laureated head to right, with *paludamentum*.

Rev.—ΚΕΛΕΝΔ . ΠΙΤΩΝ. Neptune standing by a flaming altar, holding a dolphin in his right hand, and a spear in his left.

———— Etruscilla, S. 6.

Obv.—ΕΡΕΝΝΙΑ . ΕΤΡΟΥΚΙΑΔΑ. Bust to right.

Rev.—ΚΕΛΕΝΔΕΡΙΤΩΝ. Fortune standing, with cornucopiae and rudder.

COLYBRASSUS. Maximinus, S. 9.

Obv.—ΑΥ . Κ . Γ . ΙΟ . ΟΥΗ . ΜΑΞΙΜΕΙΝΟC. Laureated head to right, with *paludamentum*.

Rev.—ΚΟΛΥΒΡΑCCEΩΝ. Jupiter seated to right, holding a spear in his right hand, at his feet an eagle.

COLYBRASSUS. Tranquillina, S. 5½.

Obv.—CAB . TPANKYAAEINA. Bust to right, with the *stola*.

Rev.—KOAYBPACCEON. Fortune standing, with the usual attributes.

DIOCÆSAREA. Trajan, S. 6½.

Obv.—AYTOKPA . T——N . CEB . ΓEP . ΔAKI. Laureated head to right.

Rev.—ΔIOKAICAPE . N. Thunderbolt.

———— Caracalla, S. 8½.

Obv.—AYTOK . KAIC . M . AYP . ANT . NEINOC . CEB. Youthful laureated bust to right; in the field an eagle, and thunderbolt in countermarks.

Rev.—AΔPI . ΔIOKAICAPEON. Jupiter in quadriga, at full speed, to right.

———— Caracalla, S. 9.

Obv.—Legend, bust, and countermarks as before.

Rev.— . ΔP . ΔIOKAI——. Pallas in quadriga, at full speed, to left, brandishing a spear and the ægis.

———— Philip, sen., S. 10.

Obv.—AYT . K . M . IOYΔIOC . ΦIAIMHOC . CEB. Radiated head to right, with *paludamentum*.

Rev.—AΔPIA . ΔIOKECAPEON . MHTPO. Veiled and turreted female seated on a cube; before her stands a turreted female holding a cornucopiæ and a rudder; *ævergue*, a river-god.

———— Philip, sen., S. 9.

Obv.—AYT . K . M . IOYΔIOC . ΦIA . . . OC . CEB. Radiated head to right, with cuirass and *paludamentum*.

Rev.—AΔPI . DIOKECAPEON . MH . ENAT. Nudo Hercules, holding in his right hand a club, and reclining on the back of a lion.

* * Sestini and Mionnet both describe this coin as Hercules reclining on a hippopotamus.

MORSUS. Domitian and Domitia, S. 10.

Obv.—AYTOKPATOP . KAICAP . ΔOMITIANOC . ΓEPM. Laureated head of the Emperor to left.

Rev.—MOΦEATON . ETO . BZP [year 162] ΔOMIT——. Head of the Empress to right.

OLBA. Faustina, jun., S. 5.

Obv.—ΦΑΥΣΤΙΝΑ . ΟΕΒΑΧΘΗ. Bust of the Empress to right.

Rev.—ΟΑΒΗΘΝ. Fulmen.

POMPEIOPOLIS. Julia Domna, S. 9.

Obv.—ΙΟΥΛΙΑΝ . ΔΟΜΝΑΝ ———. Head of Julia to right.

Rev.—ΠΟΜΠΗΙΟ———. Jupiter Nicephorus seated to left.

SELEUCIA *ad Calycadnum*. Antoninus Pius, S. 6.

Obv.————ΑΔΡΙ . ΑΝΤΩΝΙΝΟC . ΟΕΒ. Laureated head to right.

Rev.—ΟΕΛΕΥΚ . Τ . Π . ΚΑΛΥ . ΙΕΡ. Pallas standing with spear and buckler, and holding a small Victory in her right hand.

————— Caracalla, S. 8.

Obv.—ΑΥ . Κ . Μ . Α . ΑΝΤΩΝΙΝΟC. Laureated head to right.

Rev.—ΟΕΛΕΥΚΕΩΝ . ΤΩΝ . ΠΡΟ . ΚΑΛΥΚ. Nude figure seated in a *lectisternium*, with a military figure standing on either side.

TARSUS. Elagabalus, S. 6.

Obv.—ΑΥΤ . ΚΑ . Μ . ΑΥΡ . ΑΝΤΩΝΕΙΝΟC. Laureated head to right, with *paludamentum*.

Rev.—ΤΑΡΚΟΥ . ΜΗΤΡΟ—. Nude Apollo, front view, standing with a roebuck in each hand; in field, two stars.

————— Julia Paula, S. 8.

Obv.—ΙΟΥΛΙΑΝ . ΚΟΡΝΗΛΙΑΝ . ΠΑΥΛΑΝ . ΟΕΒ. Head of the Empress to right, wearing the stola.

Rev.—ΤΑΡΚΟΥ . ΤΗC . ΜΗΤΡΟΠΟΛ . Α . Μ . Γ . Β. Draped figure standing to left, holding a small Victory and a hasta.

————— Severus Alexander, S. 11.

Obv.—Α . Κ . Μ . Α . ΟΕΟΥ . ΑΔΕΞΑΝΔΡ . . Π . Π. Diademed head to right, with *paludamentum*.

Rev.—ΑΔΕΞΑΝΔΡΑΝ . ΟΕΟ . ΑΔ . ΜΗ . ΤΑΡΚΟΥ . Α . Μ . Κ . Γ . Π . Β. Pallas standing to left, with spear and patera; at her feet an altar.

TARSUS. Maximinus, S. 10½.

Obv.—ΑΥΤ . Κ . Γ . ΙΟΥ . ΟΥΗ . ΜΑΞΙΜΕΙΝΟC . Π .
Π. Radiated head to right, with *paludamentum*.

Rev.—ΤΑΡCΟΥ . ΤΗC . ΜΗΤΡΟΠΟΛΕΩC . Α . Μ . Κ .
Γ . Β . Nude Hercules standing to left, holding
his club in an upright position in his left hand.

————— Maximinus, S. 10.

Obv.—Legend and head as before.

Rev.—ΤΑΡCΟΥ . ΤΗC . ΜΗΤΡΟΠΟΛ . Α . Μ . Κ . Γ . Β .
Meleager standing to left, holding in his left hand a
spear, and in his right, probably, the golden fleece;
at his feet the Calydonian boar.

————— Gordian III., S. 10.

Obv.—ΑΥΤ . Κ . ΑΝΤ . ΓΟΡΔΙΑΝΟC . CΕΒ . Π . Π .
Radiated bust, with *paludamentum*, to right.

Rev.—ΤΑΡCΟΥ . ΜΗΤΡΟΠΟΛΕΩC . Α . Μ . Κ . Nude
Hercules standing to right, with club, in repose.

————— Gordian III., S. 10.

Obv.—Legend and head as before.

Rev.—Legend as before, with Γ . Β . Hercules standing, with
lion's skin suspended in the act of shooting the
Stymphalian bird; and beneath, a falling bird.

* * * In allusion to the sixth labour of Hercules.

————— Gordian III., S. 10.

Obv.—Legend and head as before.

Rev.—Legend as before. Two small figures on an altar, be-
tween them a cornucopiæ; on the right stands the
Emperor, and on the left a draped female with both
hands upraised.

————— Trajanus Decius, S. 9.

Obv.—ΑΥ . ΚΕ . Γ . ΜΕC . ΚΟΥ . ΔΕΚΙΟC . ΤΡΑΙΑΝΟC .
ΕΥ . ΕΥCΕΒ . Π . Π . Radiated bust to right, with
paludamentum.

Rev.—ΤΑΡCΟΥ . ΜΗΤΡΟΠΟΛΕΩC . Α . Μ . Κ . Apollo,
with a roebuck in each hand, standing on a high
column, near which, at an altar, stands the Emperor,
Mercury, and a female; below, a rhinoceros.

TARSUS. Trajanus Decius, S. 9.

Obv.—Legend and head as before.

Rev.—Legend as before, but with Γ . B. Bacchus standing.

————— Trajanus Decius, S. 9.

Obv.—Legend and head as before.

Rev.—Legend as before. Fortune standing.

————— Trajanus Decius, S. 9.

Obv.—ΑΥ . ΚΑΙ . Γ . ΜΕΘ . ΚΥΙΝ . ΔΕ—— . Π . Π. Head as before.

Rev.—Legend as before. Hercules standing, resting his right hand on his club, and holding the infant Telephus in his left; at his feet a hind.

————— Trebonianus Gallus, S. 9.

Obv.—ΑΥ . ΚΑΙ . Γ . ΟΥΙΒΙΟΝ . ΤΡΕΒΩ . ΓΑΛΛΟ . Π . Π. Radiated bust to right, with *paludamentum*.

Rev.—ΤΑΡΚΟΥ . ΜΗΤΡΟΠΟΛΕΩΣ . Α . Μ . Κ . Γ . Β, and in the *exergue* ΚΟΙΝΟΒΟΥΛΙΟΝ . ΕΛΕΥΘΕΡ . . Minerva seated to left, at her feet an urn.

————— Treb. Gallus, S. 9½.

Obv.—Legend and head as before.

Rev.—ΤΑΡΚΟΥ . ΜΗΤΡΟΠΟΛΕΩΣ . *exergue*, Α . Μ . Κ . Γ . Β. Turreted female seated on a rock; at her feet a river-god; in front, a turreted female standing.

————— Treb. Gallus, S. 9.

Obv.—Legend and head as before.

Rev.—Legend as before, but with Α . Μ . Κ . Γ . Β in the field. Diana standing.

————— Salonina, S. 8.

Obv.—ΚΟΡΝΗΛΙΑΝ . ΚΑΛΩΝΙΝΑΝ. Bust to right.

Rev.—ΤΑΡΚΟΥ . ΜΗΤΡΟ . ΑΡΚΟΥ . ΜΗ . Α . Μ . Κ. Two half-length figures of the sun joined together at the lower extremities.

LYDIA.

PHILADELPHIA. Maximinus, *S.* 7.

Obv.—Α . Κ . Γ . Ι . ΟΥΗ . ΜΑΞΙΜΙΝΟΝ. Laureated head to right.

Rev.—ΦΙΛΑΔΕΛΦΕΩΝ ΔΟΟ. Jupiter standing, holding a patera and long spear.

PHRYGIA.

ΑΡΑΜΕΑ. Valerian, sen., *S.* 8.

Obv.———. Laureated head to right.

Rev.—ΙΕΡΟΟ . ΑΠ[ΑΜ *mon.*]ΕΩΝ . ΟΛΥ[ΜΠ *mon.*]ΙΑ . ΟΙΚΟΥΜΕΝΙΚΟΟ, in five lines.

ΛΑΟΔΙΟΕΑ. M. Aurelius, *S.* 10.

Obv.—ΜΑ . ΑΥ . ΑΝΤΟΝΙΝΟΕ . ΚΑΙΕΑΡ. Laureated head, with paludated bust, to right.

Rev.—ΛΑΟΔΙΚΕΩΝ. Aurelius and Verus standing, togated, and between them a figure on a pedestal personifying Phrygia.

——— Caracalla, *S.* 6.

Obv.—ΑΥ . Κ . Μ . Α . ΑΝΤΩΝΕΙ. Laureated youthful head to right.

Rev.—ΛΑΟΔΙΚΕΩΝ. Fortune, standing with her attributes, to left.

ΟΤΡΥΣ. Geta, *S.* 6½.

Obv.— . ΣΕΠΤΙ . ΓΕΤΑ Bare head to right.

Rev.—ΟΤΡΟΗΝΩΝ . ———ΑΡΧ. Cybele seated to left.

ΟΟΟΚΛΕΑ. Gordian III., *S.* 7½.

Obv.—ΑΥΤ . Κ . Μ . ΑΝΤ . ΓΟΡΔΙΑΝΟΟ. Laureated head to right, with *paludamentum*.

Rev.—ΟΚΟΚΑΙΕΩΝ. Two draped figures standing, holding *hastæ-puræ*, and between them a *cista mystica*.

ΦΙΛΟΜΕΛΙΟΜ. Gordian III., *S.* 3.

Obv.—ΑΥ . Κ . Μ . ΑΝΤ . ΓΟΡΔΙΑΝΟΟ. Laureated head to right.

Rev.—ΦΙΛΟΜΗΛΕΩΝ. Philomela or nightingale.

GALATIA.

ANCYRA. Caracalla, *S.* 9.

Obv.—A[NT *mon.*]Ω[NE *mon.*]INOC . AYTOYCTOC. Radiated head to left.

Rev.—MHTPOΠO . A[NK *mon.*]YPAC. Diana Lucifera to right.

PESSINUS. Geta, *S.* 4.

Obv.—Π . CEΠ . ΓETAC . KA. Bare head to right.

Rev.—ΠECCIN——. Hexastyle temple.

TAVIUM. Caracalla, *S.* 7½.

Obv.—ANTONINOC . AYTOYC. Laureated bust to left, with buckler and javelin.

Rev.—TAOYIANΩN. Eagle on an altar between two standards.

TROCMI. Vespasian, *S.* 8.

Obv.—ΣEBAΣTHNΩN . TPOKMΩN. Jupiter seated to left; on his left side an eagle.

CAPPADOCIA.

CAESAREA. Tranquillina, *S.* 6½.

Obv.—CA . TPANKYAAINA . AY. Head of the Empress to right.

Rev.—MHTPO . KAIC . B . N . ET . ̣=year 6. Mount Argæus on an altar.

———— Gallienus, *S.* 11½.

Obv.—AY . K . A . ΠO . AIK . ΓAΛAIEHOC. Laureated and cuirassed bust to right.

Rev.—KAICAPEON——K . THMENO——OMONOIA= *Cæsarea and Temenothyrae in alliance.* Male figure standing, wearing a Phrygian hat, and resting his left foot on a prow; in his right hand he holds a spear; facing him stands Fortune with the modius on her head, and her usual attributes.

PHŒNICIA.

TYRE. Elagabalus, S. 5.

Obv.—IMP . CAES . M . AV . ANTONINVS . AV. Laureated head to right, with *paludamentum*.

Rev.—TYRIORVM. Two hands grasping a palm-tree; below, two flowers?

JUDŒA.

ELEUTHEROPOLIS. Sabinia Tranquillina, S. 10.

Obv.—. BINIA . TPANKYAA—. Head of the Empress to right.

Rev.—EΛEYΘEP . ETOYΘ . EOP = year 175. Minerva standing.

ARABIA.

BOSTRA. Severus and Julia Domna, S. 8.

Obv.—AY . K . CEH . CEOYHPON . KA . C . I . ΔOMAN . OEB. Their busts to right.

Rev.—NEA . TPALANH . BOCTPA. Astarte standing within a tetrastyle temple, her left foot placed on a small figure, and on either side of her another small human figure.

PHILIPPOLIS. Sev. Alexander, S. 8.

Obv.———. Laureated and paludated bust to right.

Rev.—MHTPONΠOΛEΩC . ΦIΛIΠΠIΩΠOΛEΩC . NEΩ-KOΠOY. Arranged in six lines.

ASSYRIA.

NINEVEH. Maximinus, S. 8.

Obv.———MAXIMIN———. Laureated head to right.

Rev.—COL . NINI . CLAVD. Draped male figure, driving two bulls, to right.

W. WEBSTER.

III.

NOTES ON THE ANNALS OF THE SCOTTISH COINAGE.

No. IV.

1488. In October, 1488, the first Parliament¹ of the reign of James IV. was held at Edinburgh, and an act was passed ordering a fine piece of gold to be struck of the same weight and fineness as the rose noble, with the two-thirds and one-third parts thereof. Of this coinage no specimen is now known, and possibly it was never carried out. The same act authorises the coinage of a new silver coin, to be equal in fineness to the old English groat; ten of these were to be in the ounce, and they were to have course for fourteen pence. Thirty of these groats were to go for the largest of the gold coins above mentioned. The king was to settle what device and legend were to be put on these, and he was also requested to appoint Alexander Levingston as moneyer, and James Crichton as warden of the mint, who were to have the same duties and fees as were formerly authorised in the previous reigns. Provision was also made for keeping up the supply of bullion, for making a yearly trial of the Pix, and for keeping an annual account of the amounts coined in each year. It was also enacted that all other money should stand at the former rate.

¹ "Scots Acts," vol. ii. p. 208; Balfour, vol. i. p. 215. Cardon., App., p. 20.

In January of the same year another statute² was made about the money, which authorises the coinage of a gold piece, to be of the weight, largeness, and fineness of the French crown, and to go for fourteen shillings. The coin is minutely described in the act, though no specimen has as yet been recorded. The description is interesting, because the word "*quartus*" is added on the obverse to the king's name: the first occurrence of a descriptive numeral in the Scottish series, unless the uncertain penny of Alexander, noticed in another place, turns out to have the numeral. The reverse of this piece was to bear the legend "*Salvum fac populum tuum domine.*"

The silver coinage ordered by this act was to have the same weight, standard, and value as that authorised by the previous statute, but the king's face was to "*stand eynyn*" on the coins. The usual provisions for the supply of bullion, and for carrying out more strictly the former acts, were again enacted.

It is very unfortunate that in this reign we have nothing recorded about the coinage, except in the acts of parliament. As I have already stated, it does not always happen that the coinage, authorised and described by a particular act, immediately followed the passing of the statute. For the actual issue, the moneyer's accounts are much better authority; but none of these have as yet been discovered belonging to this reign.

1489. In July of the following year two statutes were passed at Edinburgh³ about the coinage, neither of which are noticed by Cardonnel or Lindsay. The first provides that the acts of the last parliament be now put in execu-

² "Scots Acts," vol. ii. p. 212; Lindsay, App., No. 9.

³ "Scots Acts," vol. ii. p. 214, c. 9, 10.

tion, and the second that all who trade in gold or silver coin shall suffer a year's imprisonment, and forfeit all their goods to the king. If churchmen happen to offend in this particular, their case is to be remitted to their bishop, and punishments by fine are awarded. If any prelates be found guilty of the offence, the king shall receive double the amount from their temporalities.

Towards the close of the same year another parliament⁴ was convened at Edinburgh in February, in which the act given in Cardonnel's App. was passed. Stringent rules⁵ were enforced for the better regulation of goldsmiths' work, and preventing too much alloy being mixed with the metal. The deacon of the craft of goldsmiths was to examine all silver work, and to see that it was not worse than the new silver work of Bruges. The gold work was not to be made worse than the metal delivered to the workman, which was to be melted down and assayed by him in presence of the owner.

The Lords of the Articles thought it expedient at this time to appoint a master of the mint who should print money for the use of the lieges. Groats of the same weight, fineness, and value as those already specified, were to be coined. The coiners were to pay 11s. 6d. per ounce for "burnt" silver, and the same rate for Paris work, and for the new work of Bruges; but for Scottish work of less fineness, the value only of the silver was to be paid for. And if any doubt arose as to the amount of silver, two goldsmiths were to be sworn to examine it, and their award was to be agreed to by both parties. The new groats were to be equal in weight and fineness to the Edward

⁴ "Scots Acts," vol. ii. p. 221, c. 18; Cardon., App., p. 22, c. 17.

⁵ C. 13.

groat⁶ (of England), and were to have some sign of difference from the first coinage. No money was to be refused on the ground of being cracked or flawed, if the weight and metal were good.

About this time a great quantity of cracked or flawed money must have been current, for several acts are found referring to it.

1491. In 1491, the act of 1487 was again enforced⁷ as far as it referred to cracked coins, and it was ordered that any one refusing a cracked—but otherwise good—gold coin should forfeit the value of it.

A curious document⁸ of this date fixes the value of the Scottish current gold coins at the following rates, viz. :—

Rider	=	23s.	Scots.
Unicorn	=	18s.	„
Crown	=	13s. 4d.	„
Demy	=	13s. 4d.	„, and = 14s.

1493. Two years after this we find another act⁹ about the trouble caused by the refusal of the gold coins “of our soverane lordis prent” on account of their being cracked, and for the diversity of divers coinages of silver struck by various coiners, the said silver groats being of sufficient fineness and bearing “prent of our soverane lordis straik;” and it is ordered that any one who refuses these shall lose the value of them. The owner of the money that was refused was ordered to take it to the officers and baillies of the town for their judgment, and if they pronounced it bad, they were to break it in pieces, so that it should make “na mair truble.”

⁶ The groats of Edward weigh, after his fourth year, 48 grains.

⁷ Cardon. App., p. 23; “Scots Acts,” vol. ii. p. 226, c. 12.

⁸ Tytler’s “Hist. of Scotland,” vol. iii. (App.); Lindsay, App., No. 16.

⁹ “Scots Acts,” vol. ii. p. 233, c. 10.

The names of various moneyers are given in this act—Gilbert Fish, who was apparently at Berwick, and probably struck money also in the preceding reign; the late Levingston and John Curroure. With the exception of Levingston, whose name occurs in the rolls of James III., no record has as yet been found relating to the others.

Cardonnel gives an act in his appendix¹⁰ under the year 1494, which is not found in the parliament of that date, but it, or another in similar terms, occurs in 1496,¹¹ repeating the necessity of the king's appointing "ane famous and wise man" to be moneyer, who is to see that all the former acts are put in force.

A period of several years now elapses before any mention of the money is made in parliament. In 1503 James IV. married Margaret of England, and in the contract of marriage¹² we find that £2,000 sterling of English money equalled £6,000 of the money at that time current in Scotland.

In March of the same year a parliament¹³ was held at Edinburgh, and several enactments were passed about the coinage.

The acts and statutes lately made for retaining money within the kingdom were again put in force,¹⁴ as also those for bringing in bullion.¹⁵ These acts will be found in the appendix¹⁶ to Cardonnel's "*Numismata Scotiæ*," though they are not alluded to by Lindsay.

No other parliamentary enactment relating to the money is found in this reign. The accounts of the Lord Treasurer

¹⁰ Car. App., p. 24, c. 55.

¹¹ "*Scots Acts*," vol. ii. p. 238, c. 4.

¹² Ruddiman's preface to "*Anderson's Dip.*," p. 147.

¹³ "*Scots Acts*," vol. ii. p. 242, c. 11.

¹⁴ C. 11.

¹⁵ C. 45, c. 48.

¹⁶ *Conf.* "*Scots Acts*," p. 250, c. 12; and p. 254, c. 48, 44.

of Scotland, still extant in the Register House¹⁷ at Edinburgh, afford some scanty references to the coinage.

1504. Thus in the account from February, 1504, to August, 1506, the Lord High Treasurer charges himself with certain sums arising from the profit of converting 3,696 crowns ("coronarum viz., Scutorum¹⁸ Francie") into Scottish money.

In the same account is a curious entry of seventy odd pounds of silver coined into "plakkis," and obtained by melting down certain pieces of plate, viz., "de tribus antiquis amphoris argentiis de auratis, octo perapsidum, sex discorum argenteorum et quatuor salsariorum." There is also an entry of the gain arising "de duobus flaccatis argentiis vocatis de Balgony et Magister angusie," and other plate coined into pennies.

1506. Between August, 1506, and September, 1507, a considerable coinage of silver took place; but the issue is not specified,¹⁹ and during the same period a large coinage of gold was struck, the metal for which was obtained by melting down French crowns.

1508. In August, 1508, the account²⁰ shows a coinage of silver amounting to above 40 lbs., but without any further particulars. The coinage of gold for the same time amounted to 16 lbs. 3½ ozs., but no indication of what sort of coin was struck is given.

1512. In the year preceding August, 1512, a coinage of 12*d.* groats is recorded in the Treasurer's account,²¹ and also another coinage into "plakkis," the metal for which

¹⁷ "Compoti Thesaurarii," MS., Edin.

¹⁸ If the "scuta" in the Moneyer's Roll of Jas. III. are crowns, *i.e.* Lions or St. Andrews, we must then assign some of them to his reign.

¹⁹ "Compoti Thes.," MS., Edin.

²⁰ "Compoti Thes.," MS., Edin.

²¹ "Compoti Thes.," MS., Edin.

is obtained by melting down certain silver vessels. Twenty-three links of gold of the great chain "domini regis," weighing 7 lbs. 5½ ozs., were melted down and struck "in le unicornis."

1513. During the next year, Mr. Cuthbert Bailye, Treasurer, receives from David Scot, at that time "custos," the profits arising from a coinage made at that time, but no particulars are given.²²

The death of the King at Flodden, and the minority of his successor threw the government of the kingdom²³ into the hands of John, Duke of Albany. In the fine collection of coins and medals of Scotland, lately in the possession of the Faculty of Advocates at Edinburgh, there is a beautiful medal struck in gold by him while Governor of Scotland, bearing on the obverse²⁴ the arms of the Duke and Duchess on a shield, crowned, with a large cross throughout the field, and the legend:—ΙΟΑΝΝΙΣ. ΑΛΒΑΝΙΕ. ΔΥΚ. ΓΥΒΕΡΝ; on the reverse, a dove spreading her wings over the Duke's own arms on a shield, with the date 1524, and the legend, ΣΥΒ. ΥΜΒΡΑ. ΤΥΑΡΥΜ. This medal was struck out of gold found in Scotland, as appears from a reference to it in one of Wharton's letters to Wriothesly.²⁵ "I do send unto your Lordship a piece of gold coyned in Scotlande the tyme the Duk of Albanye being ther and as it was said

²² "Compoti Thes.," MS., Edin.

²³ It may be of interest to note here the arrangement of the coins of James IV. by the Rev. Mr. Martin:—

1. Groat, &c. (Dom. R.)
2. Groat, &c. (Salvum, &c.)
3. Groat, &c. (with Qt. Gra.)
4. Groat, &c. (with 4.)
5. Groat, &c. (Exurgat Deus.)
6. Groat, &c. (arched crown.)

²⁴ Nicolson, "Scot. Hist., Library," p. 299.

²⁵ "State Papers," Hen. VIII., vol. v. Part iv. No. dxciii. p. 575.

this same piece and others was coyned at his commandement of the same pieces of gold evin, as they were gotten, and of this same fynnes in Crauford Moore."

1513. On the 23rd of June the matter of the money was brought before the council,²⁶ but because it "is wechty and greit and requires grete avisement," it was deferred till the meeting of parliament.

1517. Two years after this a special permission²⁷ was given to Bertoune, the Comptroller, to coin 80 ozs. of gold into unicorns, and the Earl of Arran is allowed to coin 30 ozs. of gold "of the mynd" of the same fineness as it is got without any alloy.

There is no doubt but that at this time native gold in some quantity was found in Scotland. From a curious work by Acheson, on the discovery and history of the gold mines in Scotland, printed for the Bannatyne Club,²⁸ it would appear that in the time of the Earl of Moray, upwards of 8lbs. of gold was delivered at the mint in Edinburgh within one month, the produce of the mines on Crauford Moor and others. Leases of the gold and silver mines, which belong by the Law of Scotland to the Crown, were frequently granted both by James V. and James VI. We find one in 1526, another in 1583, another in 1593, and one so late as 1621. Malcolm Laing, in his history,²⁹ states, however, that the yield of gold from Crauford Moor to James VI. was only 3 ozs., and his outlay in mining £3,000.

1518. In March of this year it appears from the Books of Council³⁰ that the "Irnis of the Unicorn" were

²⁶ Lindsay, p. 229.

²⁷ Lindsay, p. 229.

²⁸ 1825, p. 20.

²⁹ Hadd. MSS., fols. 208, 299; Acheson on Mines, p. 99; Laing, vol. iii. p. 56.

³⁰ Lindsay, p. 280.

delivered to the treasurer in order to coin 50 ounces of gold into unicorns, to "be of the wecht of the auld unicorne," and of the fineness of the gold of the mine—not of the mint as Lindsay³¹ makes it. But because the keys were lost, and the said irons could not be got, another minute appears on the Books of Council, authorising the locks to be broken open and new ones made.

1519. In the following year another authority, in similar terms, is given to James, Earl of Arran, to coin 50 ounces of gold.

It would thus appear that unicorns were coined in the reigns of three successive sovereigns, though as the same dies were used, and the same weights kept, it is impossible to distinguish this later issue. There is even some reason to suppose that a coinage of unicorns took place during the minority of James VI. For in the treatise by Acheson, above referred to, it is stated that in the Regent Morton's time, a golden basin, of the capacity of four English quarts, was presented by him to the King of France, filled with coins called unicorns³²; both the basin and its contents being made of the native gold of Scotland.

1523. In 1523 Queen Margaret applied for permission to coin money, gold and silver; but this was refused.³³

1524. In August of the following year an act was passed which is not found in any of the published collections. It is preserved in the State Paper Office (Henry VIII., vol. ii. No. 63)³⁴, and provides that certain French money "*sous, tracentes, and karolusis*" being alloyed with copper, have course in the country; and as it is thought expedient that no alloyed money should pass

³¹ P. 136.

³² Nicolson, p. 305.

³³ "Cal. of State Papers, Scot.," vol. i. p. 16.

³⁴ Cal., vol. i., p. 18.

current in the kingdom, except at a competent price, it ordains the "sou" and the "tracent" to go for fivepence the piece, and the karolus for fourpence and no more. In the same parliament "ye Scottis crowne of we^t" is to go for "xvij Sh.," and "ye Scottis demy" for "xviii Sh.," and the other money as before.

On the 16th November another parliament³⁵ was convened, and the Archbishop of St. Andrews, the Bishop of Aberdeen, and the Earls of Arran and Argyle were appointed to look, *inter alia*, to the striking of money. A penny of gold and another of silver were to be coined as the aforesaid lords thought expedient, and the gold of the mine—apparently native gold—was to be used.

1525. In February, 1525, the Lords of the Secret Council ordered³⁶ a new coinage of gold and silver: viz., "ane crowne of gold, and ane grote of silver." This crown of gold is what is generally now called the "ecu" of James V. It was to pass for 20 shillings, and nine were to be made out of the ounce of gold. The groat was to be x^d fine 2 grs., eleven of them were to be in the ounce, and they were to pass for 18*d*.³⁷

About this time the Pitscottie Chronicle tells us that "the Earle of Angus . . . caused stryk Cunye of his awin, to witt ane grot of the valour of xvij d. quhilk efterwards was callit the Douglas Groatt." An entry in the Treasurer's account³⁸ of date 17th August, shows a coinage between 25th June and said day, which in all probability was the one referred to above. At this time the price³⁹ of native gold was £7 the ounce, and the seignorage due to the king was 25 shillings on the coined ounce of native gold, and 18 shillings for each pound weight of

³⁵ "Scots Acts," vol. ii. p. 286.

³⁶ Lindsay, p. 280.

³⁷ Vol. ii. p. 314.

³⁸ MSS. Com. Thes., Reg. House, Edin. ³⁹ Lindsay, p. 232.

coined silver, and the price of the ounce of fine silver was 17 shillings.

1526. In June, 1526, an act⁴⁰ was passed enforcing the previous acts regarding the course of the money and the import of bullion. Archibald Douglas, Treasurer and Provost of Edinburgh, was appointed, by himself or by his deputies, to search at all parts of the realm, and seize any one exporting money, and to have for his pains one half of the money escheated, the other half to go to the king. In November of this year parliament⁴¹ sanctioned the agreement entered into between Archibald Douglas and James Acheson, goldsmith, burgess of the "Cannongate," by which the said Acheson is to have freedom and privilege to coin gold and silver, he paying 20 shillings for the pound of coined money to the king, and the king to pay the warden's fee, the assayer's fee, and the fee of the "Sykaris of the Irnis;" and for the ounce of gold of native mines (of which the price is £7), the king's seignorage is to be 26s. But if the gold is dearer than £7, then the seignorage is to fall to 15s.

In the same parliament⁴² all mines of gold and other metals are conceded to Joachim Hochstetter, Quintin de Lawritz and others for the space of forty-three years. Another enactment⁴³ provided that "feigners and counterfeiters" of our sovereign lord's money should be severely punished, and all provosts, baillies, &c., were to search for and apprehend all those who counterfeit money, that they might be dealt with by the Lords Justices.

1527. In the following year the "Cunzie hous" was erected at Edinburgh⁴⁴, and a formal contract entered

⁴⁰ "Scots Acts," vol. ii. p. 306.

⁴¹ "Scots Acts," vol. ii. pp. 310, 317.

⁴² "Scots Acts," vol. ii. p. 310.

⁴³ "Scots Acts," vol. ii. p. 315.

⁴⁴ Lindsay, p. 232.

into between the King and Hochstetter about the coinage, which will be found in full in Lindsay's Appendix (No. 10). One hundred and seventy-six groats were to be struck out of the pound of silver, of the value of 18*d.* each. Hochstetter and his Company might also strike two other coins, viz., one of the value of 12*d.* or two-thirds of the former, and the other of the value of 6*d.*, or one-third of the first; or they might strike other coins either of higher or lower value, but the same amount was always to result from the same weight. For each pound of silver they were to pay 20 shillings of seignorage, and not less than £3,000 Scots were to be coined in the year. The contract was to last for ten years, and the king was to appoint two Scottish men to see that the prescribed conditions were carried out.

In the MS. Treasurer's⁴⁵ accounts several entries occur about this date of money arising from coinages; but as no particulars are given, they throw no light on the period.

1532. In May of this year the parliament ordained that, with the view of keeping gold and silver coin within the realm, the former acts made for that purpose were to be put into sharp execution.

1535. In June, 1535, a statute⁴⁶ was passed in similar terms, and appointing searchers at the various ports, who were to retain one-third of all they seized, and James Colville, of Éast Wemyss, Adam Otterburn, and Sir John Campbell of Lundy, were appointed searchers throughout the realm, with power to appoint deputies under them at the various ports, and seeing that the "mater of cunye" is "subtile and cañ not wele be decydit bot be the avise of men of craft," therefore the lords ordain the Lord Treasurer, the Comptroller, the Provost of Edin-

⁴⁵ "Com. Thes.," MSS. Reg. Ho., 1527—1537.

⁴⁶ "Scots Acts," vol. ii. pp. 336, 343.

burgh, Sir John Campbell of Lundy, the Clerks of Registers, Mr. Francis Bothwell and the Dean of Aberdeen, to convene with men skilled therein ; and their joint recommendations were to be referred to the Lords of Articles. In the same way they were to take action about the mines.

1539. In the Treasurer's account⁴⁷ for this year an entry of certain sums of money arising from the coinage of seventeen pounds, fourteen ounces troy weight of gold coined "in ducatis." These are undoubtedly the bonnet pieces of 1539, and this reference gives us the name by which these coins were generally known at the time.

From this account it also appears that Alexander Orrok was master of the mint at this period.

1540. In the following year several statutes⁴⁸ are given in the "Scots Acts" forbidding the export of money, and providing punishments for those who counterfeit the coins of the realm. In the Treasurer's accounts⁴⁹ of this year, rendered the following one, an entry occurs of "centum et triginta unciarum auri lucrati in mora de Craufurd et terris de Coreheid ponderis le trois wecht conitati in ducatis."

1542. In the account rendered in August, 1542 (from September, 1541), one hundred and fifty-nine ounces "auri Scotici" are entered as being coined during that period into ducats. The date 1541 or 1542 does not occur on the bonnet pieces, though this entry shows that they were coined in these years.

R. W. COCHRAN PATRICK.

⁴⁷ "Com. Thes.," MS. Reg. Ho., Edin.

⁴⁸ Vol. ii. p. 375, 378.

⁴⁹ "Com. Thes.," MSS. Edin.

IV.

ON MINT-CHARACTERISTICS OF ARABIC COINS.

IN studying the coins of the first two centuries of the Hijreh in a large Oriental collection, the student cannot fail to observe the striking differences in general aspect and in matters of detail which these coins present. These peculiarities are more remarkable in the early period of the Mohammadan coinage than in the later, partly because the Koofee character had not then been corrupted by excessive ornamentation nor superseded by the Naskhee, but principally because in later times coins were generally struck at capitals only, or at least at no towns but those few which were entitled to the first place in the country; whereas in the early time every province had its mint-place, and many towns smaller even than the capitals of provinces had their own coinages.

An investigation of the nature of mint-characteristics may be turned to account in several ways. The two most obvious uses of such an inquiry are (1) the determining of the mint-places of coins in which the name of the mint is illegible by reason of rubbing, oxidation, or fracture; in which cases the knowledge and recognition of the peculiarities in the calligraphy of mints would at once identify the coins: and (2) the discovery of the mint-places of deenárs (which up to the year of the Flight 199 have no localities in their inscriptions), in the absence of historical evidence.

The fine series of coins of the Amawee Khaleefehs in the British Museum affords ample materials for an investigation such as the present. Of this series I give a table

(Plate I.), comprehending all the deenárs and dirhems of this Dynasty.¹ The table needs little explanation. The mint-places are arranged in alphabetical order at the top, to each mint-place a column is assigned. At the side the years of the Flight are written. Consequently every dot may be referred by lines to a mint-place and to a date. In the first column these dots represent deenárs.² In all the other columns a dot stands for a dirhem.

Of all the mint-places, thirty-five in number, occurring on coins of the Amawee Khaleefehs in the British Museum, scarcely half-a-dozen are represented by a number of coins sufficient to give any definite idea of their distinctive peculiarities. But the series of dirhems of Dimashk (Damascus) and Wásit is so long and comparatively uninterrupted that the characteristics of these two mints may be laid down with certainty.

Below will be seen those letters which have in a special degree different forms on coins of the two cities.

DIMASHK	WÁSIT	DIMASHK	WÁSIT
ص ³	ط in ضرب etc.	ر	س in يكن
ه ⁴	ث or ه in هذا etc.	ق	و in بسم etc.

Besides these differences in the forms of individual letters, there are some general characteristics of Dimashk which it is most important to note. Coins of this city are

¹ I have not made use of the fels, in this inquiry, on account of the indistinctness, clumsiness, and scantiness of their inscriptions.

² Thirds (*thuluths*) of a deenár are represented by $\frac{1}{3}$; half-deenárs (*nisfs*, vulg. *nusfs*) by $\frac{1}{2}$.

³ This form is not decided until the year 86, and loses its character after 117.






⁴ It is a noteworthy circumstance that on coins of Dimashk this form is always used in the words هذا and الهدى; but the Wásit form is invariably adopted in يظهر and درهم.

executed in much higher relief than those of Wásit. There is a profusion of diacritical points on coins of Dimashk as contrasted with the total absence of these points on coins of Wásit. The letters to which the Damascene engraver was especially fond of attaching diacritical points are the ب of دمشق and of ضرب, and the ض of ضرب (either above ض or before م); he has also once (A.H. 85) dotted the ش of شريك. It must also be noticed that the characters on the coins of Dimashk are more compressed and smaller than those of Wásit.

That these peculiarities should be found throughout the whole series of coins of both cities, with scarcely a single exception (see p. 57), is indeed a remarkable fact. Great caution, however, must be exercised in the attribution of broken or rubbed coins by this method. The general aspect as well as every visible detail must be carefully taken into consideration before we arrive at a definite conclusion. There is very little chance of any difficulty in assigning a coin to Dimashk, on account of that city's decided mint-peculiarities. But the case is different with Wásit. The Wásit style can only be regarded as the best type of one common to several cities, such as El-Koofeh, Sáboor, and Ardesheer-Khurrah.

I have stated that this study of the characteristics of various mints may be turned to good account in discovering the places where deenárs were struck. We know that Damascus was the capital of the Amawee Khaleefehs; and we may reasonably conclude that the deenárs were struck there. There may be historical evidence to this effect: to search for this is not my present purpose; but, whether there be or not, the fact that the deenárs were struck at Dimashk is placed beyond a doubt by the styles of the coins themselves. On examination I have found

that every one⁵ of the characteristics I have mentioned as peculiar to Dimashk exist also on (I believe all) the deenárs in the collection; the ض, the ʾ, the م, the frequency of diacritical points, on deenárs, are the same as those on the dirhems of Dimashk.

With regard to the م, however, I remark that a deenár of A.H. 101 has a م with its tail askew (thus  ⁶), neither horizontal as on dirhems of Wásiṭ, nor perpendicular as on those of Dimashk. In the next year it is written thus , which, though still more unlike the Damascene style, is not identical with that of Wásiṭ; the difference being that in the deenár the whole loop of the م is above the tail, whereas in the dirhems of Wásiṭ the loop is half above and half below the tail. In 104 the perpendicular  was restored; but in 106  again appears, and keeps its ground to the end of the dynasty. As the perpendicular م is one of the chief characteristics of Dimashk,⁷ we should find it difficult to reconcile its absence with the hypothesis that the deenárs were struck at that city were it not for the happy discovery of a م with its tail askew () on a dirhem of Dimashk of the year 106 and on another of 118, although in 105 and 108 the perpendicular tail occurs. Further the dirhem of Dimashk of 119 has a horizontal (but not a Wásiṭ-)tail; and finally the tail askew was resorted to in 121, 122, 125. These variations in the dirhems of Dimashk, contemporaneous with the changes in the deenárs, instead of injuring my theory, strengthen it by new proofs.⁸

⁵ The word بيسك does not occur on deenárs of this dynasty.




⁶ The same form may be observed in the first three deenárs (A.H. 78-80).

⁷ The only other instance of its use is on the solitary coin of Armeeneeyeh (A.H. 100).

⁸ In these remarks on م I refer only to the final م of بسم; that in لم is always perpendicular on dirhems of Dimashk and on

But is it conceivable that all the gold coins in use throughout the whole length and breadth of the vast Mohammadan Empire could have been struck at Damascus alone for a century or more; that such countries as Egypt, Spain, Barbary, and Persia, had no individual gold coinages? I have carefully searched for any traces of another mint in *deenárs*, but in vain.⁹ Either the coinage of Damascus was universal, or other countries copied exactly the Syrian style of mintage. But if they copied the *deenárs*, how is it that we do not find that *e.g.* El-Andalus copied the *dirhems* of Dimashk? I therefore conclude that all the gold coins of this dynasty were struck at Damascus, and despatched to the provinces.

Before I conclude this brief sketch of a part of a subject which I am convinced might be worked out to considerable results, I will mention some curious variations in the word **في** (also written **في**) which generally precedes the word **سنة** in the legend of the obverse. Three forms are very remarkable:

Wásiṭ  Er-Ray  El-Başrah 

Dimashk at first had but a puny **في**, and after the year of the Flight 80 dropped the word altogether. Wásiṭ used the word in 97, but in 99 it had disappeared *in perpetuum*. Unfortunately there is no coin of this city for A.H. 98 in the British Museum, nor is it to be found in the works of Tornberg, Fræhn, Stickel, or Marsden. It must therefore be left undecided for the present whether the innovation took place for the first time in 98 or in 99.

deenárs, the only exceptions being the first three *deenárs* (78–80) mentioned before in a note. The **م درهم** of **م** varies in much the same way as that of **بسم**.

⁹ Since writing the above I have been informed by Colonel C. Seton Guthrie that there exists in his collection a *deenár* struck at Afreekiyeh in the 2nd century of the Hijrah.

The reason for the change cannot be conjectured, no addition to the length of the legend having been made.

I have carefully avoided, in the table of coins, a mistake into which several Numismatists seem to have fallen; namely, the confusion of the three names of Balkh, Jay, and Er-Ray. This has arisen from the supposition that Jay is written with the definitive *el*, which it never is.

The woodcut below will show the resemblance between this imaginary El-Jay, and Balkh, and Er-Ray: in each case the preposition *bi* is prefixed.



Bi-l-Jay



Bi-Balkh



Bi-r-Ray

M. Soret in his admirable work on Mohammadan Numismatics makes this observation: "Quoi qu'il en soit, il est bon de prendre toujours note de la présence des points et de la position qu'ils occupent, parce que leur étude peut conduire à des résultats intéressants et utiles; le professeur Lindberg est le premier qui ait attiré l'attention des orientalistes sur ce sujet, qui avait complètement échappé à la clairvoyance de ses prédécesseurs" (p. 27). I have tried in vain to obtain Prof. Lindberg's essay, which might have been of considerable use to me. I make this statement in order to exculpate myself from any future charge of having followed the prevalent custom of plagiarism.

It is to be hoped that researches similar to mine may be carried on by those Oriental Numismatists who have access to the fine collections of the Continent.

STANLEY E. LANE POOLE.

V.

GLASS, AS A MATERIAL FOR STANDARD COIN WEIGHTS.

So little is known respecting the so-called glass coins of the Mohammedans, which are variously alluded to as "vitrei numi,"¹ as "monnaies de verre," and as "monnaies fictives,"² that I propose to lay before the Numismatic Society a full description of my collection of these relics—many of which are as yet unpublished—together with my reasons for believing that they were primarily designed as standard *weights* for coins, and that they were never intended to be used as *current* coins or *representative* pieces of money.

By the courtesy of its author, I have just received a copy of the article, which appeared in Vol. XII., p. 199, of the *Numismatic Chronicle*, on Arabic glass coins, by Mr. Stanley E. L. Poole, the perusal of which has induced me to revise my partially prepared article on this subject, in order that I may answer some of the arguments which he has brought forward in support of his theory that these vitreous *plaques* were ever issued or accepted as *coins*.

¹ Numi Mohammedani by Pietraszewski, pp. 97 et seq., and Adler's *Collectio numorum Cuficorum*, pp. 151 et seq.

² L'Univers, Egypte Moderne, par J. J. Marcel, pp. 139 et seq., but the author does not give any authority for these appellations, simply taking it for granted that they were fictitious coins, and without assigning any sufficient reason.

It was my intention, before proceeding to the chief purpose of this article, to refer minutely to the origin of Mohammedan coinages. But having recently received the comprehensive work entitled "*Essai sur les systèmes métriques et monétaires des anciens peuples*," in which the learned author, Don V. Vazquez Queipo, has almost exhausted the subject, it remains for me merely to refer to his deductions in this particular direction. He has consulted generally the same authors that I have; but there are two valuable works of which he clearly had no knowledge, from which much additional information may be obtained. I refer to *Kitâb el Kâmil fi t-Tarikh* by Ibn el Athîr, and to *Kitâb Heyât el Heiwân* by Sheikh Kimal ed din ed demîri.

The Omeyyah Khalîfah Abd ul Malik ibn Merwân was the first to strike dînârs and dirhams of a purely Mohammedan type. The coins in use until his time in the Mohammedan dominions were Byzantine dînârs and Sassanian dirhams, on the latter of which certain Mohammedan formulæ were introduced. The Mohammedan rulers adopted the customs, weights, measures and coins of the people they had conquered, not being sufficiently settled at that early period to give their attention to the establishment of new institutions.³

The first dînârs and dirhams were made in the proportion of 7 to 10, the dînâr weighing 21·75 kirâts and the dirham 15. These weights have been variously rendered by modern numismatists, some give their equivalent values as $21\cdot75 : 15 = 67$ grs. : $46\cdot2$ grs.⁴ whilst Mr. S. Poole values them respectively at 65·5 grs. and 45·5 grs.⁵

³ Queipo, p. 18, vol. ii.

⁴ Professor Maskelyne, note in Mr. Thomas' *Initial Coinage of Bengal*, p. 9.

⁵ *Arabic Glass Coins*, page 201.

Most Arabic authors use the words mithkâl and dînâr so vaguely that the reader is often led to believe that the terms are synonymous. This however is an error. The word mithkâl ميثقال simply means "a weight," the weight of anything large or small, the weight of one object as compared with another, and conventionally, *the weight of 24 kirâts*. The word used alone ought not to be made to signify dînâr.

My collection of glass weights may be divided into four distinct categories. Firstly, thirty-six weights struck by the Fatimite Khalîfahs, and bearing their names. It is known that the size and weight of dînârs and dirhams were frequently changed by the reigning Khalîfah. It was therefore necessary that the name or date should appear on the standard coin weight, lest the merchant should inadvertently weigh a new coin by an old and obsolete standard.

Secondly, glass weights which present certain inscriptions, confirming the theory that they are weights. Of these I have four, and I think they are of much earlier date than the time of the Fatimite Khalîfahs. Indeed I think they must belong to the time of the Omeyyah dynasty. I find in an article on "Die nominale der münzreform des Chalifen Abdulmelik," by Dr. E. von Bergmann, an allusion in note 1 to page 24, to two glass discs of this class, one bearing this inscription بِسْمِ اللَّهِ ضَرْبُ هَذِهِ النِّصْفِ سَنَةِ مِائَةٍ *In the name of God this half was struck in the year 100*. And the other bearing مِثْقَالُ نِصْفٍ وَأَنْفِ *Weight of a half, full weight*. Its weight is given as 2.142 grammes, equal to about 33 grains.

Thirdly, glass weights of an evidently later period, bearing rude inscriptions and legends similar in character to those found on the coins of the Bahrit Mamlûke sovereigns of Egypt and Syria.

And fourthly, those on which there are devices, such as a rosette, a double triangle, without any inscription, and those which have neither device nor inscription.

GLASS WEIGHTS BEARING THE NAMES OF THE FATIMITE KHALÎFAHS.

THE FOURTH FATIMITE. AL MO'ÏZ LEDIN ILLAH ABU TEMÎM
MO'AD.

1. Dark green, transparent; diameter 1·10 inch, weight 86 grs.

Legend.—**الامام معد أبو تميم المعز لدين الله** The Imâm Mo'ad
Abu Temîm Al Mo'iz ledin illah.

Area.—**أمير المؤمنين** Emir ul mumenîn.

2. Pale green, transparent; diameter 0·40 in., weight 5·8 grs.

This disc does not appear to have been worn away, but it only represents a portion of the die. The inscription is simply **معد** Ma'ad with a portion of a word below it.

THE FIFTH FATIMITE. AL 'AZÎZ BILLAH.

3. Dirty white, transparent; diameter 0·68×0·56 in., weight 21·5 grains.

Inscription in two lines **العزیز بالله** Al 'Azîz billah.

4. Pale green, transparent; diameter 0·64×0·54 inch, weight 14·7 grains.

Within a dotted octagon, an inscription in four lines.

الامام العزیز بالله أمير المؤمنين

The Imâm al 'Azîz billah Emîr ul Mumenîn.

THE SIXTH FATIMITE. AL HÂKIM BIAMR ILLAH.

5. Pale green, transparent; diameter 1·04 inch, weight 65·5 grs.

Inscription in five lines. **الامام الحاكم بأمر الله أمير المؤمنين**

مما عمل في سنة احدى واربع ميه عدل The Imâm al
Hâkim biamr illah Emîr ul mumenîn. Of what were
made in the year four hundred and one. Justice (or just).

6. Pale green, transparent; diameter 1·04, 0·90 inch, weight 64 grains.

Obverse.—Inscription in six lines. الامام الحاكم بامر الله امير المؤمنين مما عمل في سنة ثلث واربع ميه عدل. The Imâm el Hâkim biamr illah, Emîr ul mumenîn. Of what were made in the year four hundred and three. Just.

Reverse.—The Fatimite symbol in three lines.

7. Green, transparent; diameter 0·80 inch, weight 45·4 grains.

Inscription.—الحاكم بامر الله. Al Hâkim biamr illah.

8. Green, transparent; diameter 1 inch, weight 91 grains.

Inscription.—الحاكم بامر الله. Al Hâkim biamr illah.

9. Pale green, transparent; diameter 0·82 in., weight 37·7 grs.

Obverse.—Inscription in three lines.—

الامام الحاكم بامر الله وولى عهده

The Imâm al Hâkim biamr illah and his heir-apparent.

Reverse.—Three lines of inscription, illegible.

10. Pale green, transparent; diameter 1 inch, weight 90·5 grs.

In a dotted circle, inscription as in No. 9.

11. Pale green, transparent; diameter 0·86 in., weight 45·1 grs.

In a dotted circle, inscription as in No. 9.

12. Pale green, speckled with brown; diameter 0·66 in., weight 22·3 grains.

In a plain circle, the inscription.—الامام الحاكم وولى عهده.

The Imâm al Hâkim and his heir-apparent.

13. Pale green, transparent; diameter 0·86 in., weight 32·5 grs.

Obverse.—In a dotted circle, the same inscription as in No. 9.

Reverse.—The Fatimite symbol.

14. Pale green, transparent; diameter 1·04 in., weight 91·5 grs.

In a dotted circle, the inscription.—الحاكم بامر الله. Al Hâkim biamr illah.

15. Pale green, transparent; diameter 0·64 in., weight 22·8 grs.
In a plain circle, the inscription.—الحاكم بامر الله. Al Hâkim biamr illah.

THE SEVENTH FATIMITE. ADH DHÂHIR LI'AZÂZ DÎN ILLAH.

16. Dark yellow, transparent; diameter 1·06 in., weight 91·6 grs.
In a plain circle, the inscription in three lines.

الظاهر لاعزاز دين الله امير المؤمنين

Adh Dhâhir li'azâz dîn illah, Emîr ul mumenîn.

17. Pale green, translucent; diameter 1 inch, weight 93 grains.
In a plain circle, the inscription.—الامام الظاهر. The Imâm adh Dhâhir.

18. Dirty white, transparent; diameter 1 in., weight 77·5 grains.
Obverse.—In a plain circle, three lines.

الامام الظاهر لاعزاز دين الله امير المؤمنين

The Imâm adh Dhâhir li'azâz dîn illah, Emîr ul Mumenîn.

Reverse.—An inscription which is so much worn as to be illegible.

19. Pale green, transparent; diameter 0·30 inch, weight 23 grs.
In a circle, the word.—الظاهر Adh Dhâhir, with an ornament above and below it, and four prominent dots.

20. Pale green, transparent; diameter 0·84 in., weight 45·7 grs.
In a dotted circle the same inscription as in No. 18 and a dot above and one below.

21. Green, transparent; diameter 1·0 inch, weight 58·5 grains.
Obverse.—Legend, the first general symbol. Area, same as in No. 18.

Reverse.—An inscription which is defaced and illegible.

THE EIGHTH FATIMITE. AL MOSTANSIR BILLAH.

22. Yellow, with a tinge of green, transparent, diameter 1·02 × 0·85 in., weight 46·8 grains.

Legend.—الامام معد ابوتميم المستنصر بالله امير

The Imâm Mo'ad Abû Temîm al Mostansir billah, Emîr*.

Area.—المومنين. Ul Mumenîn.

23. White, with a tinge of pink, transparent; diameter 0·85 in., weight 46·3 grains.

In three horizontal lines, beginning with the lowest and reading upwards.—*الامام المستنصر بالله*. The Imâm al Mostansir billah.

24. Rich blue, transparent; diameter 0·90 in., weight 44·7 grs.

Legend.—*الامام معد ابو تميم المستنصر بالله*. The Imâm Mo'ad Abû Temîm, Al Mostansir billah.

Area.—*امير المومنين*. Emîr ul Mumenîn.

25. Pale tinge of green, transparent; diameter 1·22 in., weight 131·2 grains.

Legend and area as in No. 24.

26. Dirty white, transparent; diameter 0·90 in., weight 46·8 grs.

In three horizontal lines, the legend and area of No. 24.

27. Green, speckled with brown; diameter 1·32 inch, weight 130·2 grains.

Legend and area as in No. 24.

28. Pale green, transparent; diameter 0·94 in., weight 46·8 grs.

In four horizontal lines, the same inscription as in No. 22.

29. Pale green, transparent; diameter 0·92 in., weight 46·3 grs.

Legend and inscription as in No. 24.

30. Green, transparent; diameter 0·98 inch, weight 42·3 grains.

Legend and inscription as in No. 24.

THE NINTH FATIMITE. AL MOSTA'ALA BILLAH.

31. Green, transparent; diameter 0·95 inch, weight 45·7 grains.

Inscription in three lines.

الامام احمد المستعلى بالله امير المومنين

The Imâm Ahmed al Mosta'ala billah Emîr al Mumenîn.

32. Green, transparent; diameter 0·84 inch, weight 46 grains.

Inscription.—*الامام احمد*. The Imâm Ahmed; beneath which is a word which may be *المستعلى* Al Mosta'ala, but it is not easy to decipher it positively.

33. Green, transparent; diameter 0.98×0.82 in., weight 48 grs.

Area.—الامام أحمد. Al Imâm Ahmed. Legend illegible.

34. Pale green, transparent; diameter 1.02 in., weight 57.8 grs.

Inscription in four lines.—احمد الامام ابوالقاسم المستعلي
بالله امير المومنين. Ahmed the Imâm abû-l Kâsim al
Mosta'ala billah, Emîr al Mumenîn.

THE TENTH FATIMITE. AL AMIR BI AHKÂM ILLAH.

35. Dark green, transparent; diameter 1.06 in., weight 92.1 grs.

Legend.—الامر باحكام الله. Al Amir bi ahkâm illah.

Area.—Illegible.

THE ELEVENTH FATIMITE. AL HAFIZ LEDÎN ILLAH.

36. Turquoise blue, opaque; diameter 0.54 in., weight 15.3 grs.

Only a portion of the original die appears on this disc, in

three imperfect lines,—... الله امير المومنين ...

Al Imâm Al Hâfiz ledîn illah, Emîr ul Mumenîn.

We now come to the second series of glass weights.

37. Transparent green; diameter 1.32×1.26 in., weight 90 grs.

Within a plain circle, in bold simple characters, apparently of very early date, an inscription in seven lines, which I read thus—بسم الله مما امر به القاسم بن عبيد الله—

مشقال فش الدين ثلثين خروبه ا ا ف

In the name of God. Of those which Al Kâsim son of 'Obeid Allah ordered.

The weight in dinâr-kharûbs of thirty kharûb seeds, after which are three signs. Pl. II., Fig. 1.

In this specimen, which, it must certainly be admitted, is a weight, and not a coin, I was at first much puzzled by the last word in the fourth line. I tried to read it *fels*, but there are only three "teeth" after the first letter; and eventually I thought it might be read *فَش* *flash*, which according to the *Ḳamûs* is a kind of Kharûb tree, and is explained by Kazimirski as *Ceratonia siliqua*, and is probably the species of Kharûb tree whose seeds are

specially selected for weighing gold and silver. The seeds of other Kharûb trees may be larger or smaller, whilst these are a fraction more than three grains each. I think we may put them down at 3·03, and that that is also the weight of the kirât seems almost obvious. This reading I submit to those who take an interest in this subject, and am quite open to conviction, should a more satisfactory interpretation be suggested.

This disc in its present state weighs exactly 90 grains. A small piece has been broken from the rim, which will perhaps allow for it to have weighed originally 91 grains or two dirhams of 45·5 each.

38. Pale green, transparent; diameter 1 inch, weight 38·6 grs.

In a square field four lines.—بسم الله مثقال درهم وزن ثلاث عشرة خروبه. In the name of God, dirham weight, weight of thirteen kharûbs. The characters on this weight are very similar to those on the preceding one, No. 37. It has been slightly injured on the reverse side, where there is an illegible inscription. If the kharûb seed be taken at 3·03 grains, this disc must have weighed originally 39·39 or in round numbers 39·4 grs. Pl. II., Fig. 2.

39. Rich blue, transparent; diameter 0·88 in., weight 32·5 grs.

In the area is a star with eight rays and eight dots. Pl. II., Fig. 3.

Legend.—بسم الله مثقال نصف دينر. In the name of God, the weight of half a dinâr.

On the reverse is an inscription partially defaced, which I can partly read thus: على يدى صالح بن سيف. By the hands of Salih ibn . . .

In these three glass discs the word *mithqâl* is used almost synonymously with *wasn* وزن to mean a weight.

40. Pale green, transparent; a fragment of about half a disc. It has the remnant of an inscription with—

سبعة وعشرين خروبه. Twenty-seven Kharûb seeds.

41. Very dark green, transparent; a mere fragment, represented in Pl. II., Fig. 4. The segment represents a circle of the diameter of 2·18 inches, thickness 0·34 inch. This would certainly be a very inconvenient size for a coin.

42. Very dark green, transparent; a fragment.
43. Green, transparent; weight 64·5 grains.
Inscription almost obliterated, the word **الله** God alone being legible.
44. Dark green, transparent; diameter 1·12 in., weight 84·4 grs.
Inscription almost obliterated.
45. Pale green, transparent; diameter 0·6 inch, weight 14·8 grs.
Illegible inscriptions on both sides.
46. Pale green, transparent; diameter 1 inch, weight 61·1 grs.
Illegible inscription.
47. Green, transparent; diameter 1·16 inch, weight 221 grains.
A square stamp on the face which cannot be deciphered.
This weight is 0·46 inch in thickness.
48. Pale green, transparent; diameter 1·06 in., weight 90·5 grs.
Two legends and an area in Fatimite style; illegible.
49. Very pale green, transparent; diameter 1·06 inch, weight 85·8 grains.
Fatimite legend and area; illegible.
50. Pink, transparent; diameter 1 inch, weight 88·6 grains.
Fatimite legend and area; illegible.
51. Very pale green, opaque; diameter 0·80 in., weight 46 grs.
Fatimite legend and area; illegible.
52. Green, transparent; diameter 1 inch, weight 65·5 grains.
Fatimite inscription and legend; illegible.
53. Very dark green, translucent; diameter 0·94 in., wt. 42 grs.
Fatimite area and legend; obliterated.
54. Green, transparent; diameter 1·02 inch, weight 91·5 grains.
Fatimite area and legend; illegible.
55. Pale pink, transparent; diameter 0·84 inch, weight 38·2 grs.
Fatimite area and legend; illegible.

56. Green, transparent; diameter 1 inch, weight 70·8 grains.
Obverse.—In a dotted circle, an inscription much abraded.
Reverse.—Part of the Fatimite symbol, much defaced.
57. Green, transparent; diameter 1·06 inch, weight 80 grains.
 Fatimite inscription; illegible.
58. Pale green, transparent; diameter 0·64 in., weight 18·8 grs.
 A Fatimite inscription illegible.
 On the reverse, a part of the Fatimite symbol legible.
59. Pale green, transparent; diameter 0·64 in., weight 22·5 grs.
 Fatimite inscription, illegible.
60. Pale turquoise colour, opaque; diameter 0·54 in., weight
 15·2 grains.
 Imperfect impression—الله, a scroll beneath.
61. Dark green, transparent; diameter 1·06 in., weight 92·8 grs.
 Legend and area, illegible.
62. White with a tinge of yellow, transparent; diameter 0·94 in.,
 weight 91 grains.
 Inscription illegible.
63. Pale yellow, transparent; diameter 0·90 in., weight 66·7 grs.
 Inscription in area, and legend, illegible. Of the Mamluke
 style of characters.
64. Pale green, variegated with blue, transparent; diameter
 0·90 inch, weight 48·3 grains.
 Inscription in area, and legend in Mamluke style; illegible.
65. Pale green, transparent; diameter 0·80 inch, weight 45 grs.
 Inscription illegible.
66. White, opaque; diameter 1 inch, weight 91·7 grains.
 Inscription illegible.
67. Pink, transparent; diameter 0·84 inch, weight 45·7 grains.
 Inscription illegible.
68. Turquoise blue, translucent; diameter 1 in., weight 88·2 grs.
 Inscription in three lines illegible.

69. Dark crimson, opaque; diameter 1 inch, weight 92·4 grains.
Inscription in Mamluke style, illegible.
70. Dark green with blue patches; diameter 1·06 inch, weight 89·2 grains.
Inscription unintelligible.
71. White with brown speckles, opaque; diameter 0·92 inch, weight 90·2 grains.
Unintelligible inscription.
72. Rich ultramarine blue, with white streaks; diameter 1 inch, weight 92·4 grains.
In the centre is the word محمد Mohammed, legend illegible.
73. White, with a pale blue patch, transparent; diameter 1·02 inch, weight 93·4 grains.
Inscription illegible.
74. Greenish white, with a pink patch, transparent; diameter 1 inch, weight 92 grains.
Inscription illegible.
75. Brownish pink, transparent; diameter 0·90 inch, weight 46·2 grains.
This specimen is in a good state of preservation, but I cannot decipher a word of the inscription.
76. Very dark crimson, translucent; diameter 0·96 inch, weight 83·4 grains.
Illegible inscription.
77. Rich crimson, transparent; diameter 0·98 in., weight 89·0 grs.
Illegible inscription.
78. Rich dark crimson, opaque, with a white opaque patch; diameter 1·08 inch, weight 93·4 grains.
Inscription illegible.
79. Brown, opaque; diameter 1 inch, weight 89·8 grains.
An illegible inscription.
80. Yellowish green, with brown specks, transparent; diameter 0·82 inch, weight 48 grains.
Illegible inscription.

81. Brownish pink, transparent; diameter 0·90 in., weight 60·3 grs.
In bold characters. **بسم الله** In the name of God.
82. Dark carmine, opaque; diameter 1 inch, weight 90 grains.
In bold characters of more modern style. **أحمد سنة أربعين**
Ahmed the year Forty. The century is not given, but I think this weight must have been struck in about the sixth or seventh century of the Hijreh. See Pl. II., Fig. 5.
83. Pale pink, transparent; diameter 0·86 in., weight 46·1 grs.
In characters similar to those on No. 82. **العودى سنة خمسين**
Al 'Aûdy, the year fifty.
84. Dark crimson, opaque; diameter 0·94 inch, weight 88·4 grs.
In characters similar to those on No. 82.
رسم الحسن عمل العودى
The design of al Hassan, the work of Al 'Aûdy.
85. Pink, transparent; diameter 1 inch, weight 93·5 grains.
العودى Al 'Aûdy.
86. Pale pink, transparent; diameter 0·84 inch, weight 45·4 grs.
يعقوب سنة عشر Yâkûb the year ten. There is a word above which I cannot decipher.
87. Greenish white, with blue patches; diameter 1 inch, weight 92·8 grains.
محمد بن شاهين سنة أربع وعشرين Mohammed, son of Shahîn, the year twenty-four.
88. Rich ultramarine blue, translucent; diameter 1 inch, weight 93·2 grains.
محمد بن شاهين سنة ست عشر Mohammed, son of Shahîn, the year sixteen.
89. Pale pink, transparent; diameter 0·96 inch, weight 66·4 grs.
الح السيد على Es seyid 'Ali.*
90. Pale pink, with a blue patch; diameter 0·84 inch, weight 47·2 grains.
Inscription as in No. 89.

91. Rich yellow, translucent; diameter 1 inch, weight 92 grains.
عمل حسن The work of Hassan.
92. Green, transparent; diameter 0.80 inch, weight 28.8 grains.
Illegible inscription.
93. Dark brown, opaque; diameter 0.72×0.62 in., weight 23.8 grs.
Illegible inscription.
94. Turquoise blue, opaque; diameter 1.00×0.90 inch; weight 89.5 grains.
عمل عمر The work of Omar (?). I am not quite confident of the correctness of this reading.
95. Dark yellow, translucent; diameter 1 inch, weight 89.7 grs.
Illegible inscription.
96. Pale pink, transparent; diameter 1.08×1 inch, weight 91.5 grains.
Illegible inscription.
97. Very dark crimson, opaque; diameter 1 inch, weight 92 grs.
Illegible inscription.
98. Milky white, with a blue patch, translucent; diameter 1 inch, weight 93.6 grains. Unintelligible inscription.
99. Very dark crimson, opaque; diameter 0.76 in., weight 46 grs.
Illegible inscription.
100. Blue, translucent; diameter 0.86 inch, weight 49.8 grains.
Illegible inscription.
101. Pale green, with a patch of blue, transparent; diameter 1 inch, weight 92.9 grains. Illegible inscription.
102. Dark yellow, translucent; diameter 1 inch, weight 81.9 grs.
Illegible inscription.
103. Greenish white, opaque; diameter 0.96 in., weight 93.8 grs.
Illegible inscription.
104. Very dark yellow, opaque; diameter 1 inch, weight 93.3 grs.
Illegible inscription.

105. Very dark crimson, opaque; diameter 0·96 inch, weight 89·8 grains.
عمل عمر The work of 'Omar.
106. Very pale green, transparent; diameter 1 in., weight 92·6 grs.
بالله الامام The Imâm (probably Al Mostansir) billah.
107. Pink, transparent; diameter 1·08 × 1·00 in., weight 89·7 grs.
Inscription illegible.
108. Dark carmine, translucent; diameter 1 in., weight 90·5 grs.
Inscription illegible.
109. Yellow, transparent; diameter 0·64 inch, weight 22·9 grs.
Inscription illegible.
110. Brown, translucent; diameter 1 inch, weight 93·9 grains.
Inscription illegible.
111. Dark crimson, opaque; diameter 0·96 × 1·04 inch, weight 81 grains.
Inscription illegible.
112. Black, opaque; a fragment.
علي 'Ali.
113. Pale green, transparent; diameter 0·48 in., weight 13·4 grs.
On this little disc there is an elongated letter with three dots above it (ا . . .).
114. Very dark green, opaque; diameter 1 inch, weight 92 grains.
A *fleur de lys* and عمل عمر 'Omar. See Pl. II., Fig. 6.
115. Very dark crimson, opaque; diameter 1 in., weight 89·5 grs.
A *fleur de lys* and عمل عمر 'Omar, as in No. 114.
116. Very dark crimson, opaque; diameter 0·96 in., weight 92·8 grs.
A rosette with six leaves. See Pl. II., Fig. 7.
117. Green, transparent; diameter 0·76 inch, weight 44·2 grains.
A rosette with eight leaves. See Pl. II., Fig. 8.

118. Greenish white, opaque; diameter 1 inch, weight 85·2 grains.
A double triangle which is called by the Arabs "Solomon's seal." See Pl. II., Fig. 9.
119. Very dark crimson, opaque; diameter 1 inch, weight 86·6 grs.
A double triangle, like the preceding, with a dot in the centre.
120. Very dark crimson, opaque; diameter 0·96 in., weight 90·2 grains.
A double triangle with an illegible word in the centre.
121. Very dark crimson, opaque; diameter 1 inch, weight 82·8 grs.
A double triangle with a dot in the centre.
122. Crimson, translucent; diameter 0·84 inch, weight 44·8 grs.
A double triangle with a dot in the centre.
123. Dark crimson, opaque; diameter 1 inch, weight 89·4 grains.
A double triangle with a circlet in the centre.
124. Crimson, with a patch of white, opaque; diameter 0·94 inch, weight 45·8 grains.
A double triangle.
125. Yellow, transparent; diameter 1·10 inch, weight 94 grains.
A double triangle made of wavy foliated lines, with a circlet in the centre, and a letter within the circlet.
126. Greenish yellow, transparent; diameter 1·07 inch, weight 92·2 grains. Like No. 125.
127. Deep crimson, opaque; diameter 1 inch, weight 89·5 grains.
Like No. 125.
128. Turquoise blue, opaque; diameter 1·00 × 0·90 inch, weight 91·8 grains.
A smooth circular area without inscription.
129. Clear crystal, a fragment, wavy lines on each side.
130. Greenish white, transparent; diameter 0·74 inch, weight 45·2 grains.
No inscription, a hole through the centre.

131. Greenish white, transparent, diameter 0·76 in., weight 35·8 grains.

No inscription, a hole through the centre.

132. White, opaque, diameter 0·80 inch, weight 46·0 grains.

الله
الامام } Al Imâm an Nâsir ledîn illah.
الناصر
لدين

133. Greenish white, translucent; 0·98 inch, weight 90·1 grains.
Same inscription as in No. 132.

134. Greenish yellow, transparent; diameter 1·08 inch, weight 69 grains.

A Greek monogram. See Pl. II., Fig. 10.

135. Variegated blue and white, transparent; diameter 0·80 inch, weight 34·5 grains.

A Greek monogram. See Pl. II., Fig. 11.

The following glass discs belong to my friend Mr. H. Sauvaire, who has kindly lent them to me, with permission to publish a description of them.

- 1 s. Green, transparent; diameter 0·80 in., weight 21·8 grains.

In an area, extending quite to the edge of the disc on one quarter of its circumference, and leaving a very narrow margin at the other three quarters, is an inscription in seven lines, in characters very similar to those found upon my No. 35, this emanating evidently from the same manufactory and under the auspices of the same Kâsim son of 'Obeid Allah.—*امرالله بالوفاء وامره بطبعه مثقال*

ثلث القاسم بن عبيدالله على يدى .. بن سيف سنة عشرة

God ordered full weight (or full payment) and al Kâsim son of 'Obeid Allah ordered the stamping of it, the weight of a third, by the hands of . . . son of Seif? the year ten.

The last two words are rather indistinct, consequently I am

1



2



3



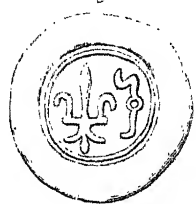
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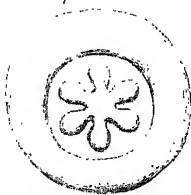
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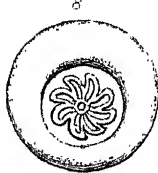
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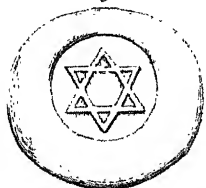
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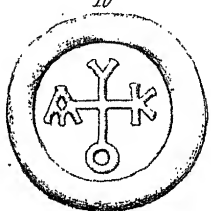
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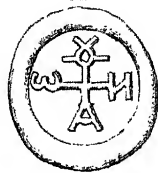
9

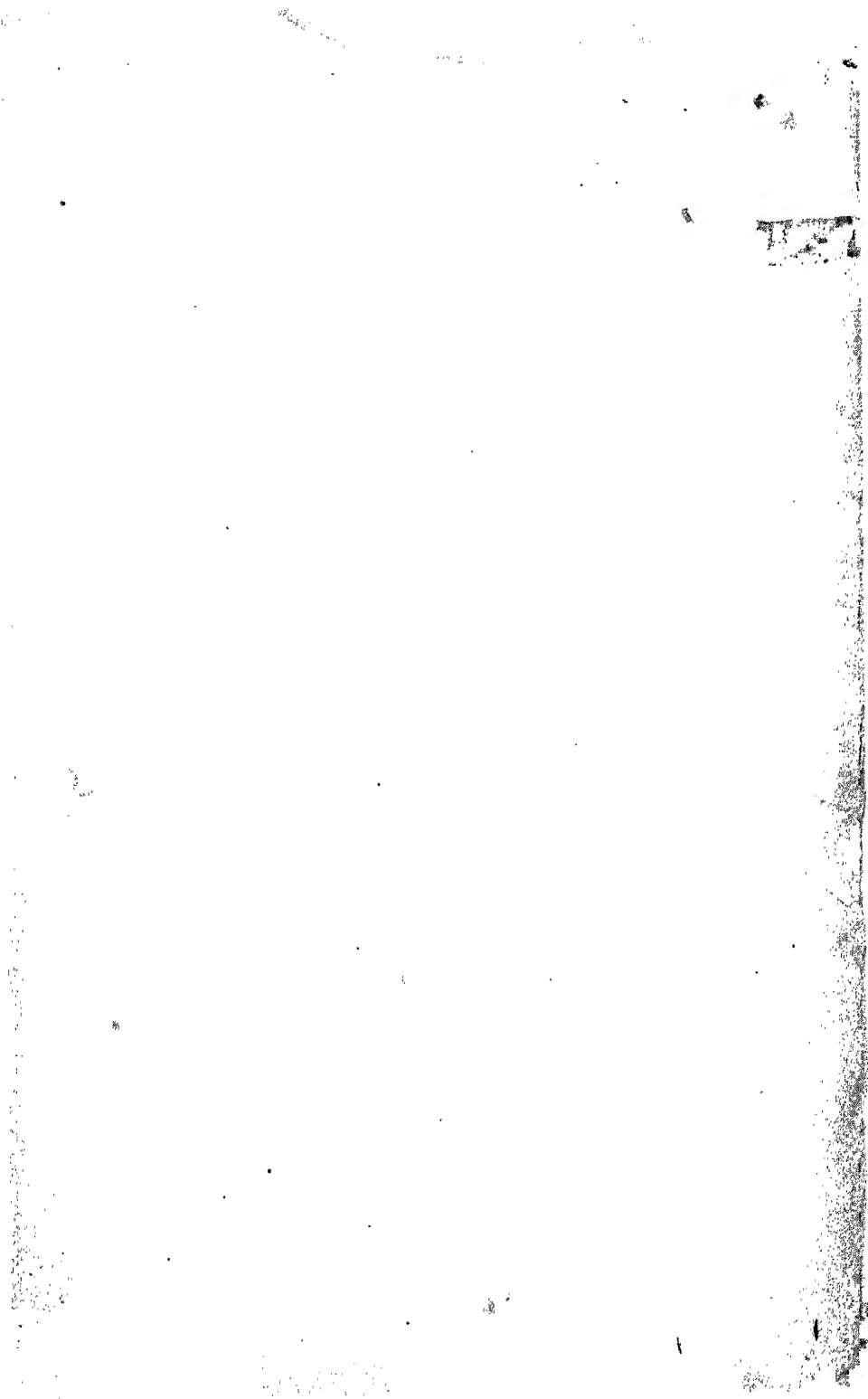


10



11





not quite confident of my reading. The weight is that of a third of 65·4 grains. The word مقال I have read Mithkâl in the belief that it is a clerical error for مشقال. The disc is in excellent preservation, and I believe it retains its full original weight.

- 2 s. Pale green, a fragment; واف Full weight, and beneath that word a geometrical figure of five angles.
- 3 s. Pale green, transparent; diameter 0·64 inch, wt. 20·9 grs.
In two lines.—الحاكم بامر الله. Al Hâkim biamr illah.
- 4 s. Pale green, transparent; diameter 1·04 × 1 in., wt. 53·3 grs.
This disc has two legends which are illegible. In the area I read—الملك لله. To God belongs all. It is oxidized so as to present the appearance of having been silvered or gilt.
- 5 s. Green, transparent; diameter 1·08 in., weight 91·7 grains.
Obverse.—Within a dotted circle, two horizontal lines.—
الحاكم بامر الله وولي عهده. Al Hâkim biamr illah, and his heir-apparent.
Reverse.—The Fatimite symbol.
- 6 s. Dark green, transparent; diameter 0·88 × 0·72 inch, weight 44·8 grains.
Within a dotted circle.—الامام لنزار. The Imâm en Nazâr.
This is the name of the Fatimite Khalifah Al 'Azîz billah.
- 7 s. Green, transparent; diameter 0·74 in., weight 33·1 grains.
Inscription.—بسم الله. In the name of God.
- 8 s. Dirty white; diameter 0·96 inch, weight 91·6 grains.
A double triangle.

The following discs belong to the Rev. Greville Chester, who kindly placed them in my hands for the purpose of illustrating this subject.

- 1 c. A disc of baked clay covered with turquoise blue glaze ; diameter 1·08 inch, weight 226·4 grains.

The weight of five dirhams at 45·5 grains would be 227·5, which was probably the original weight of this disc ; the glaze has been chipped off in several places, thus exposing the white clay beneath it.

- 2 c. A disc of turquoise blue colour, opaque; diameter 0·48 in., weight 14·8 grains.

This is very similar to my No. 36, but presents more of the original die than mine. The inscription is just as I had read it on my own specimen.

- 3 c. Pale green, speckled with brown; diameter 1 inch, weight 92 grains.

A double triangle; an illegible inscription in the centre.

- 4 c. Very pale green, with a patch of reddish brown on one side; diameter 0·80 inch, weight 44·5 grains.

Inscription admitting of several readings.

- 5 c. Clear, with a slight pink tinge; diameter 0·80 in., weight 47·3 grains.

Centre—احمد. Ahmed. Legend in which appears the words—سنة عشرين. The year twenty.

- 6 c. Brownish pink, translucent; diameter 0·66×0·59 inch, weight 23·1 grains.

A sort of lattice work of crossbars on the circular field.

- 7 c. Clear with a pinkish tinge; diameter 0·66 in., wt. 17·6 grs.

I look upon this as a very curious specimen. It represents a vase in the centre, and is surrounded by a legend which I am unable to decipher; I am inclined to believe it is not Arabic.

- 8 c. Pale blue, transparent; diameter 0·54×0·48 inch, weight 10·9 grains.

Inscription—الامام محمد. The Imâm Mo'ad.

9 c. Pale green, transparent; diameter 0.74×0.68 inch, weight 38.6 grains.

On one side a bearded face looking to the right.

On the other side half length figure with wings.

This is probably of Greek manufacture.

There are also two glass discs which at first sight might be mistaken for weights of the same class as No. 9 c.; but on further examination of them they are found to be broken on the top edge, as though they had been originally cast as pendants.

The larger of the two represents an animal suckling two small creatures, which I think represent Romulus and Remus. Above the she-wolf are a star and crescent.

The other specimen represents a lion *passant* surmounted by a star and crescent.

These two discs are both of a brownish yellow colour, and transparent.

In the three collections here above described it will be seen that the weights of the majority of the discs correspond very closely with the recognised weights of *dinârs* and of *dirhams*, of their multiples and subdivisions. Those which do not so correspond are in some instances badly preserved specimens, having suffered abrasion from some cause; whilst others are probably the representatives of altered standard weights. The two specimens of Greek weights are well preserved, and represent so accurately the weights of the *solidus* and half *solidus*, that I think there can be no doubt as to their use; and if we find certain slight discrepancies in the Mohammedan weights, we must take into consideration the rather unsettled state of the Mohammedan empire, and must not expect in Arabic weights to find quite the same accuracy that we meet with amongst those of the more civilised Greek nation.

In the following table I have divided the weights in my collection, and placed their numbers under the subdivisions which, I believe, they respectively represent :

$\frac{1}{4}$ DİNÂR. 16·25 grains.	2 DİNÂRS. 131 grains.	80—48·0 83—46·1 86—45·4 90—47·2 99—46·0 100—49·8	66—91·7 68—88·2 69—92·4 70—89·2 71—90·2 72—92·4	121—82·8 123—89·4 125—94·0 126—92·2 127—89·5 128—91·8
4—14·7 36—15·3 45—14·8 60—15·2 113—13·4 2 c.—14·8 9 c.—10·9	25—131·2 26—130·2	117—44·2 122—44·8 124—45·8 130—45·2 131—35·8 132—46·0	73—93·4 74—92·0 76—83·4 77—89·0 78—93·4 79—89·8	133—90·1 5 s.—91·7 8 s.—91·6 3 c.—92·0
$\frac{1}{3}$ DİNÂR. 21·6 grains.	$\frac{1}{2}$ DIRHAM. 22·7 grains.	6 s.—44·8 4 c.—44·5 5 c.—47·3	82—90·0 84—88·4 85—93·5 87—92·8 88—93·2 91—92·0	5 DIRHAMS. 227·5 grains.
3—21·5 58—18·8 1 s.—21·8 3 s.—20·9	19—23·0 59—22·5 93—23·8 109—22·9 6 s.—23·1	2 DIRHAMS. 91 grains.	94—89·5 95—89·7 96—91·5 97—92·0 98—93·6 101—92·9 102—84·9	47—221 1 c.—226·4
$\frac{1}{2}$ DİNÂR. 32·7 grains.	DIRHAM. 45·5 grains.	1—86·0 7—80·0 8—91·0 9—82·0 10—90·5 14—91·5	103—93·8 104—93·3 105—89·8 106—92·6 107—89·7 108—90·5 110—93·9	GREEK. SOLIDUS. 69 grains. 134—69
13—32·5 39—32·5 92—28·8 7 s.—33·1	11—45·1 20—45·7 21—46·8 22—46·3 23—44·7 24—46·8	16—91·6 17—93·0 18—77·5 35—92·1 37—90·0 44—84·4	111—81·0 114—92·0 115—89·5 116—92·8 118—85·2 119—86·6 120—90·2	HALF SOLIDUS. 34·5 grains. 135—34·5
DİNÂR. 65·5 grains.	28—46·8 29—46·3 30—42·3 31—45·7 32—46·0 33—48·0	49—85·8 50—88·6 54—91·5 56—70·8 57—80·0 61—92·8 62—91·0		QUARTER SOLIDUS. 17·2 grains. 7 c.—17·6
5—65·5 6—64·0 27—58·5 34—57·8 43—64·5 46—61·1 52—65·5 63—66·7 81—60·3 89—66·4 4 s.—53·3	38—38·6 51—46·0 53—42·0 55—38·2 64—48·3 65—45·0 67—45·7 75—46·2			

In reply to Mr. S. Poole's first argument, that the "glass discs are circular, thin, flat, and are therefore convenient for currency, whereas weights might be, and are, rings or blocks of metal of any shape," I would direct attention to the two glass discs with Greek monograms in my pos-

session, which are represented in Pl. II., Fig. 10 and Fig. 11. They are respectively of the exact weight of a solidus and a half solidus. These discs are in a very perfect state of preservation, and I am inclined to believe that they were standard weights used by merchants and dealers, not for weighing their wares, but for weighing the coins which were received or paid by them.

I believe that weights of this description were in use amongst the Greeks, and even amongst the Mohammedans, so long as Greek coins were current; that when the Khalifah Abd ul Malik had made coins of a purely Mohammedan type, he, or perhaps some subsequent Khalifah, was induced to copy the Greek custom of making glass weights for the purpose of testing the weight of the current coins.

Metal weights, moreover, were not always rings or blocks. The Rev. Greville Chester has shown me a number of old Byzantine weights, which are circular discs of bronze, of different sizes.

For many years I have carefully examined numerous Arabic histories, in the hope of finding some allusion to the use of glass by the Mohammedans as a material of which coins or weights were made at some period of their history. It is only recently that I have found what I have been so long seeking.

When in A.H. 75 or 76 the Byzantine Emperor sent to the Khalifah Abd el Malik ibn Merwan, threatening that he would cause *dînârs* to be engraved with inscriptions insulting the name of the Prophet Mohammed, the Khalifah was greatly perplexed, and he summoned the chiefs and nobles of the people to advise him how to act. None gave him any satisfactory advice, until Mohammed, son of 'Ali, son of Hussein, spoke as follows: "You shall immediately call the workmen and order them to make dies for *dînârs*

and dirhams, putting on one side of them the Chapter of the Unity, and on the other side the Mission of the Prophet. Place on the margin of every dirham and dīnār the name of the town and year in which it is struck. Determine the weight of thirty dirhams of the different kinds, take ten whose weight shall be ten mithkāl, ten whose weight shall be six mithkāl, and ten whose weight shall be five mithkāl. The united weights of these thirty dirhams is twenty-one mithkāl. This you will divide by thirty, and the result will be that every ten dirhams should be equal to seven mithkāl. And you shall cast weights of glass, which cannot alter either by increase or by decrease, and you shall make the dīnārs to the weight of ten mithkāl, and the dirhams to the weight of seven mithkāl. The dirhams, in those days, were the Kesrawīyeh, which are now called Baghalīyeh, because Ras el Baghl coined them for 'Omar, with the die of Chosroes, in the days of Islam. There is engraved on them the portrait of the king, below the throne is written in Persian نوش خور, which means 'eat with health.' Their weight before the Mohammedan era was a mithkāl. The dirhams, of which ten were of the weight of six mithkāl, and those of which ten weighed five mithkāl, were called the Sāmariyeh. Of both light and heavy the inscription was Persian."⁶

Notwithstanding a passing doubt as to the entire accuracy of this narrative, we cannot help being struck by this allusion to glass weights. I have translated the entire passage, firstly, that it may be the better understood; and,

⁶ See Hayât ul Heiwân, vol. i. page 80; the original mention of the glass weights is in these words—وتصب منجات من قوارير—لاتستميل الى زياده ولا نقصان.

secondly, because M. Queipo states that the dirhams, ten of which were equal to five mithkâls, are not mentioned by any Arabic author; and he assumes that D'Herbelot made his calculation, and that he arrived at the result that such dirhams must have existed.⁷

It must be borne in mind that Demîri wrote this book, *Hayât el Heiwân*, in A.H. 773, more than seven hundred years after the time at which it is stated that Mohammad, son of Hussein, gave such important advice to Abd el Malik. The striking of purely Mohammedan coins only began in the year 76, and was gradually developed into its subsequent importance. We cannot therefore believe that all the advice attributed by Demîri to Mohammad ibn Hussein was really given by him at first, and before any coins were struck. We must consider that the place of the mintage being found, together with the date on dînârs and dirhams of a later period, and glass weights being at that subsequent date used for weighing them, the author of *Hayât el Heiwân*, or the author from whom he quotes, assumed that even these subsequent improvements and developments were originally suggested by the same Mohammad ibn Hussein, who probably merely advised the Khalifah to abolish the foreign coinage, and to strike dînârs and dirhams of purely Mohammedan type, in order to circumvent the Greek Emperor who had threatened to coin dînârs containing derisive epithets as applied to the Prophet Mohammed. But at any rate I look upon the allusion to glass coin weights as a confirmation of my theory that these discs were not intended for current coins.

Moreover, Ibn ul Athîr mentions special weights for

⁷ See *Essai sur les systèmes métriques et Monétaires*, vol. ii. page 130.

testing the weights of dirhams and dīnārs, but does not state of what material they were made.⁸

In reply to Mr. S. Poole's second argument, I cannot see that glass is an inconvenient material for coin weights. Glass does not corrode, if simply the most ordinary care be bestowed upon it. A glass weight could not be reduced in size or in weight without easy detection. An accidental fracture would at once be noticed. And I think that glass would be much more inconvenient a material as applied to current coin than as applied to coin weights. Would not a disc such as No. 39, Fig. 4, be a very awkward coin? As a weight it remains in a box or a drawer with the scales, and is the representative of the weight of a certain known number of dīnārs or dirhams.

Thirdly, "It is clear that the point that would *almost* settle this question is the weight of each glass disc." Mr. S. Poole does not inform us how many discs are in the collections to which he alludes. In my collection I have 135. I have had the advantage of examining M. Sauvaire's collection, consisting of eight; and the Rev. Greville Chester's recent acquisitions, to the number of nine. I have weighed each one very carefully in scales made for me in London, and verified on scientific principles by Messrs. Young and Son, of Cranbourne Street, Leicester Square. I have given without reserve the exact weight of every disc that has come under my notice, only omitting the weights of fragments, from which evidently no argument could possibly be deduced.

⁸ Al Kamil fi t tarīkh, vol. iv. page 337. وكان الناس لا يفرقون
الوزن انما يزنون بعضها ببعض فلما وضع لهم سمير السنج كقف
بعضهم عن غبن بعض

At first sight these glass discs seem to agree almost exactly with the weight of dirhams and dīnārs, their multiples and their subdivisions; but on closer examination we find many which weigh intermediate numbers of grains, corresponding with no proportion of either dirham or dīnār as at present calculated.

It certainly would be ridiculous to weigh with 19 grains instead of 16·3 grains, as Mr. S. Poole remarks; but this *reductio ad absurdum* is hardly to the point. For, firstly, we do not know exactly what the piece now weighing nineteen grains originally represented. We cannot tell by *how* much it may have been reduced in weight by friction in the sand or by the accidental application of acids; nor, in the second place, do we know at what exact period the said disc was cast. We know that the weights of dīnārs and dirhams were frequently changed and modified by various Mohammedan rulers. Abd ul Malik first made them at the rate of 21·75 kīrāts to the dīnār and 15 kīrāts to the dirham.⁹ Ibn el Abbas reduced the weight of the dirham to 14·75 and afterwards to 14·50 kīrāts.¹⁰ Under Harūn er Rashīd the dirham weighed 14·25 kīrāts; and in A.H. 184 it was temporarily reduced to 10·55.¹¹ The glass coin weights, which we cannot exactly identify, may have been cast at either of these periods of altered standards; for I repeat that I never supposed these discs to have been destined for the weighing of wares, but only for the weighing of dirhams and dīnārs, their multiples and subdivisions.

Fourthly, as to the argument that the largest number of

⁹ Essai sur les systèmes métriques et monétaires, vol. ii. p. 145.

¹⁰ Idem, vol. ii. page 160.

¹¹ Idem, vol. ii. page 161.

glass discs issued by one ruler were those issued by the eighth Fatimite Khalifah Al Mustansir billah, I cannot admit this as a "fact." It is not so recorded in history. Mr. Poole has accidentally found the name of that Khalifah repeated more often than any other on the discs that have come under his notice; but I must take the opportunity of stating that in my collection—and this consists of all that I have been able to obtain during many years past, having purchased without reserve all that have been offered to me—the palm must be yielded by the 8th to the 6th Fatimite Khalifah. Of the Fatimite glass discs that I have deciphered,

2 belong to the 4th Khalifah			
2	"	"	5th "
11	"	"	6th "
6	"	"	7th "
9	"	"	8th "
4	"	"	9th "
1	"	"	10th "
1	"	"	11th "

I do not consider that the introduction of the name of the town Al Mansûriyeh, in which a certain glass disc was cast, is any proof that it was a coin rather than a weight. Al Mansûriyeh was for a long time a most important capital, and the name of that place would give a sort of guarantee that the disc was cast under Government auspices and of the required size or weight.

We now come to the description of two discs by Mr. S. Poole, and with all deference I must object to his translation of the words ميزان دينار. The words really mean literally *the weight of a dînâr*, not the "equal of a dînâr," the word ميزان having its root in the word وزن.

I think that the scarcity of glass discs is another collateral proof that they were not used as coins. Glass does not

actually perish by being buried. The action of fire or of certain acids would alone injure it. Were these discs the representatives of the countervalue of current coins, hoards of them would doubtless have been found, just as hoards of gold, silver, and copper coins are often found. These discs, however, have never been found in hoards. I have for many years past purchased them one or two at a time from shopkeepers in the druggists' and other bazaars in the East. Moreover, a fact worthy of remark, though not of itself a proof either one way or another, is that both the Rev. Greville Chester and myself have found these discs almost invariably in the little boxes or drawers in which the shopkeeper kept his other weights and scales.

The conservatism of Orientals is well known, and it is my belief that these glass coin weights have been handed down from father to son, from generation to generation, and passed on to each succeeding occupier of the shop, with its trade, weights, and scales, and that they have been intuitively retained by their recent owners long after their critical usefulness had passed away.

I have not replied to Mr. S. Poole in any spirit of contention. But I have found certain data which had escaped his observation, and I have sought to lay those data and my deductions from them before the readers of this Journal in the simple cause of numismatic science. Equally I trust I have not overstepped the legitimate limits of controversy, in the foregoing arguments, in support of my theory that these extant glass discs were once *STANDARD coin weights*.

E. T. ROGERS,

CAIRO, Jan. 8, 1873.

H.B.M. Consul.

P.S. Since I wrote the foregoing article, I have discovered that larger discs and blocks of glass were made by the Mohammedans, which were probably used for weighing

either large numbers of coins or perhaps the wares in the shops. One in the National Collection at Paris has an Arabic inscription, and the word رطل *rotl*. One in the Slade collection in the British Museum may be referred to as a weight. And lastly a disc just discovered by my friend M. Sauvaire has the words نصف وقية *half ounce* in very bold Kufic characters. This weight is of dark greenish yellow glass, and is translucent; but the surface presents a variety of colours, such as are often found on specimens of old glass after having been buried for a long time. Its present weight is 235·5 grains. The wūkīyeh or ounce in use in the present day in Egypt is 576 English grains, making the half wūkīyeh 228 grains.

E. T. ROGERS.

CAIRO, Jan. 22, 1873.

VI.

THE GREEK AUTONOMOUS COINS FROM THE CABINET OF THE LATE MR. EDWARD WIGAN, NOW IN THE BRITISH MUSEUM:

PART I.

I PROPOSE to lay before the readers of the Numismatic Chronicle an account of the Greek autonomous coins selected from the magnificent collection of the late Mr. Edward Wigan, and purchased by the British Museum.

Mr. Wigan, who for many years past had devoted all his leisure time, and, I may add, a large portion of his immense fortune, to the formation of his cabinet of coins, spared no expense to render it one of the finest collections ever got together in the hands of a private individual; not so much on account of its extent, as for the remarkable condition of the specimens contained in it, many of them, rarities seldom to be procured in good preservation, but which he often succeeded in obtaining in the most exquisite condition. This is especially noticeable in the series of the Roman medallions and large brass, a portion of his collection upon which he bestowed the greatest attention. I shall not, however, on the present occasion, attempt any description of the Roman portion, because a catalogue of medallions is now in course of publication by the British Museum, in which all Mr. Wigan's specimens

will be figured as well as described. I confine myself, therefore, to the Greek series, and of these I am compelled to set aside the Imperial, because an account of this portion of the collection, highly interesting and important as it is, would involve me in a task for which I have no leisure, and the completion of which I could not therefore guarantee. The coins selected from Mr. Wigan's collection were chosen with great care by the officers of the Department of Coins, and the nation has lately purchased them for the Museum, by means of a special grant of money from the Treasury. The Museum is to be congratulated on having been enabled to pick and choose from such a collection as that of the late Mr. Wigan. Shortly after that gentleman's death, his collection was purchased, *en bloc*, by the celebrated and enterprising French firm, Messrs. Rollin and Feuardent, who, without a moment's delay, placed the whole collection in the hands of the Keeper of Coins and Medals, with full authority to make any selection from it which he might think fit.

After a careful examination of the whole, coin by coin, it soon became evident to the officers of the Medal Room, that it would be useless to ask the Treasury for a grant of money so enormous as to enable them to purchase all that was required for the Museum cabinets. Had they done so, the whole transaction must have fallen through. It was therefore necessary to draw a line somewhere, and the following principle of selection was adopted.

In the first place the whole of the English portion was sacrificed at a blow, with the exception of a single piece, viz., the unique crown of James III. The wisdom of this step will be acknowledged by the most ardent of English Numismatists, when it is remembered that this

portion of the collection will be sold to English collectors, and remain in English cabinets, probably at some future time to be again offered to the National Museum. With the Greek and Roman portions the case was different; had these been rejected in favour of the English, Messrs. Rollin and Feuillant could have disposed of them, and without delay, to foreign museums and collectors, and thus they would have been for ever lost to this country.

In the second place, an exhaustive selection was made from the Roman medallions and large brass, which, for beauty and rarity, were unexampled in any European cabinet. Such a liberal selection has now rendered this portion of the Museum collection unrivalled in any country.

In the third place came the Greek series, and here the line had to be drawn more strictly: endless rarities had to be ruthlessly sacrificed, only such pieces as were absolutely indispensable being chosen for purchase. The selection completed, the Treasury was asked for a special grant, which, after some correspondence, was agreed to.

I must here remind the readers of the Chronicle that, in the year 1864, Mr. Wigan made a donation to the trustees of the British Museum of his splendid collection of Roman gold coins, which contained the pick of some of the grandest collections formed during the last century, the cabinets of Pembroke, Devon, Thomas, and Dupré included; such a munificent gift to the Department of Coins being unique in the history of the Museum.

I consider therefore, that the nation owes to the memory of Mr. Wigan a debt of gratitude which can never be sufficiently repaid; this collection of Roman gold having been worth between £5,000 and £6,000. Mr. Madden, in

vol. v. N.S. of the Num. Chron., gave an interesting account of the Wigan Gold Roman Coins, and I propose to contribute in the following pages an account of those coins from the Greek autonomous portion which have lately been added to the Museum collection. I shall endeavour to render my description of the coins as full as is compatible with the space which is at my disposal, giving the obverse and reverse types of each specimen, and adding a few remarks in cases where the coins are of any special importance, my object being both to interest the general reader of the Chronicle, and to make known as widely as possible the importance of the acquisition by the nation of a series of Greek coins, comprising among them very many valuable pieces, as well as a large number of specimens of unapproachable beauty of art and of rare historical interest. In my description of the coins in this cabinet, I shall follow the usual geographical order, as being at once the best known, and, for general purposes of reference, the most convenient, although I believe that a more scientific arrangement of Greek coins is not only practicable, but highly advisable, on more grounds than one, as will be at once manifest when we call to mind that the geographical arrangement from West to East not only places in juxtaposition the coins of cities which may have flourished at long intervals of time from each other, but tears asunder the coins of colonies and those of their mother cities, breaking up monetary systems, and rendering it very difficult to obtain a clear idea of the principal coinages current at any given period of ancient history. For my present purpose, however, the geographical system serves as well, or better, than a more scientific arrangement. I shall, therefore, now proceed with my account of the coins selected, beginning with those of Italy.

ITALY.

POPULONIA ETRURIE.

1. *Obv.*—Head of Pallas, full-face towards left, wearing helmet with three crests, ear-ring and necklace.

Rev.—VJ 1. Three letters of the name AIVJ 1 V 1, surrounded by a dotted circle, within which a crescent enclosing a star. *Æ.* .85; wt. 129.5 grs.

2. *Obv.*—Head of Gorgon with protruded tongue, beneath C (mark of value.)

Rev.—Plain. *Æ.* .5; wt. 32 grs.

This coin is a hemidrachm or triobol.

3. *Obv.*—Head of Hephæstos (?), right, wearing laureated pilos; behind C (mark of value).

Rev.—AIVJ 1 V 1. Caduceus bound with fillet. *Æ.* 1.05; wt. 182 grs. Semis.

Populonia, as the chief, if not the only maritime city of Etruria, appears to have also been the chief Etrurian town with a regular coinage in silver. Its coins seem to follow in weight a reduced Attic standard, although the marks of value upon them appear to indicate a different monetary system. Mommsen (Ed. Blacas, vol. i., p. 217), supposes the silver of Populonia with the Gorgon head to have been imitated from the early coins of Athens of a similar type, struck about B.C. 594.

ETRURIA, uncertain city.

4. *Obv.*—ΘΕΙΛΕ (θεζλε). Bull's head and shoulders to right.

Rev.—Sea-horse, right. *Æ.* .85; wt. 144.7 grs. Pl. III. fig. 1.

The inscription on this curious piece may be compared with that upon a silver coin in the British Museum, having on the obverse a winged Gorgon, and on the reverse an

archaic wheel, with the letters $\frac{\textcircled{\text{E}}}{\text{I}\square}$, a second example of which exists in the Museo Kircheriano at Rome, with the inscription $\frac{\textcircled{\text{E}}}{\text{J}\square}$. No satisfactory explanation of this remarkable legend has as yet been hazarded, for that of the Duc de Luynes, who would read OEFI, and who attributes them to Veii, cannot surely be considered as such (*Revue Num.*, 1859, p. 367). However this may be, the coins are certainly Etrurian. The sea-horse on the reverse of the present specimen would point to a maritime city, while its weight proves that it belongs to a different monetary system from that in use at Populonia.

TUDER UMBRIÆ.

5. *Obv.*—Young male head, right, wearing petasos with flattened top, tied under the chin.

Rev.—EGETVT. Sow with three pigs, right. Æ. .95.
Pl. III. fig. 2.

The obverse of this coin represents, according to Cavdoni, the head of Æneas (Caved. ad. Carell., Tab. xxi., Nos. 45 and 46); and the reverse, the renowned white sow which appeared to Æneas, and gave birth to thirty pigs on the spot where the town of Alba Longa was afterwards founded. It is not at once apparent, however, why this type should have been adopted by the town of Tudér.

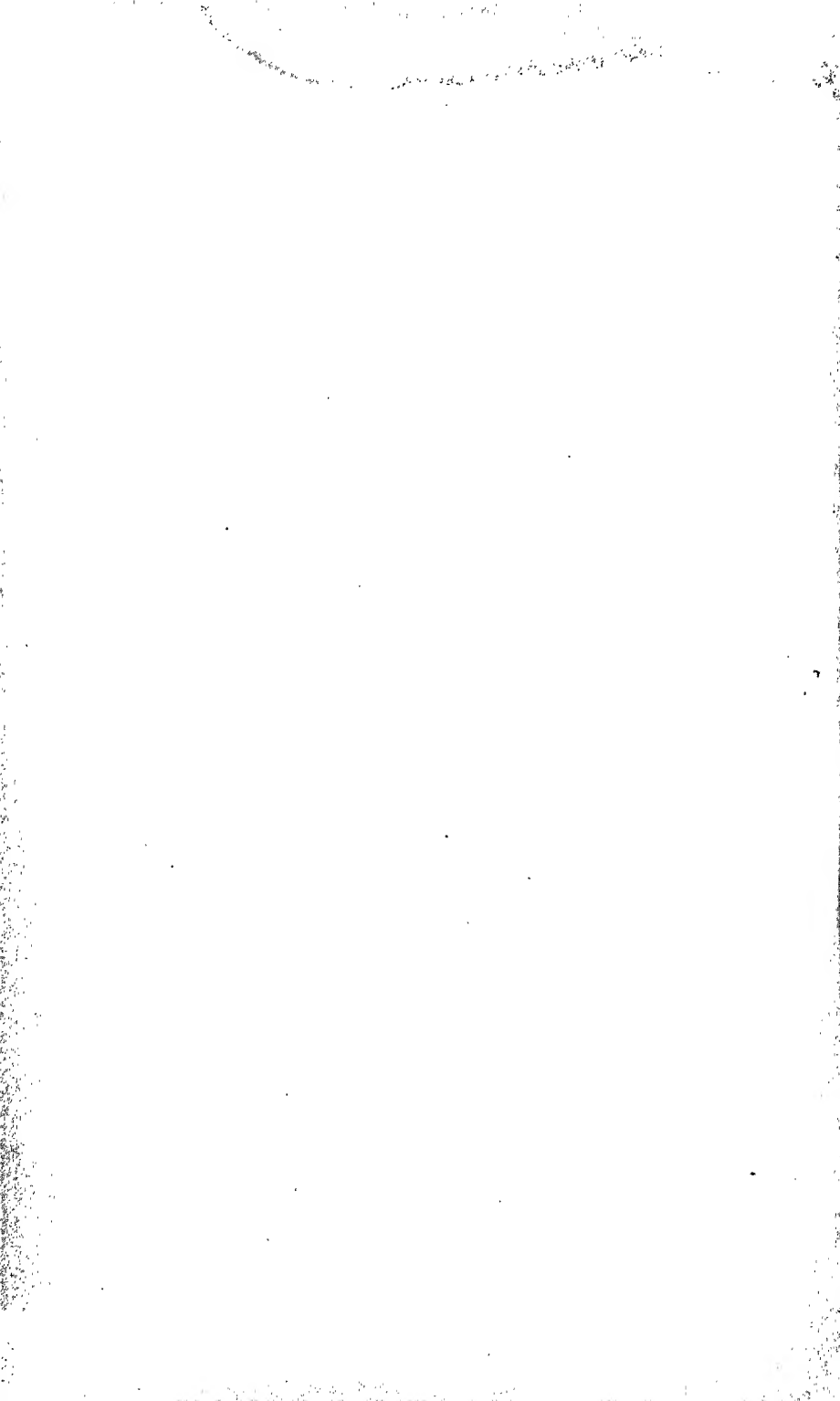
The supposed nummus of Servius Tullius exhibits on the obverse a somewhat similar type, see the Duc de Luynes' article in the *Revue Numismatique*, 1859, p. 322.

AQUINUM LATII.

6. *Obv.*—Head of Pallas in crested Corinthian helmet, left.

Rev.—AQVINO. Cock to left; above star. Æ. .75.

The coins of this town, which was situated on the Via Latina, on the borders of Latium, resemble those of Cales



Suessa, Teanum, and other towns of Campania. They are of considerable rarity.

NEAPOLIS CAMPANIE.

7. *Obv.*—Head of Apollo, laureated, right, back hair hanging down neck in formal curl.

Rev.—^{TON}NEOIIIOAI. Half bull, swimming, right. Æ. 4.

TEANUM CAMPANIE.

8. *Obv.*—Head of Hermes, hair falling in curls over neck, wearing petasos, over his shoulder the caduceus; behind, star.

Rev.—ΑΥΙΙΧ[ΙΡΙ >]. Man-headed bull walking right; above, star. Æ. 75. Pl. III. fig. 3.

This coin of Teanum is remarkable as presenting the unusual type of a head of Hermes with flowing hair.

NEAPOLIS APULIE.

9. *Obv.*—Head of Dionysos crowned with ivy, right; over his shoulder, the thyrsos.

Rev.—NEAII. Bunch of grapes between two vine-leaves, countermarked with caduceus. Æ. 7. Pl. III. fig. 4.

The modern town of Polignano now occupies the site of this city.

TARENTUM CALABRIE.

10. *Obv.*—Horseman, right, wearing loose chiton and conical hat or helmet, holding reins with left, and with right about to strike with spear; horse prancing.

Rev.—TAT. Taras riding on dolphin, left, holding in raised right uncertain object, beneath dolphin, cockle shell and waves. Æ. 95; wt. 123 grs. Didrachm.

The style of the obverse of this coin is very different from that of the common didrachms of Tarentum, and it must be considered as the earliest example of the horseman type, and as belonging to the transitional style of art

between the archaic and the fine periods. It is engraved in Carelli, pl. cix. fig. 115.

11. *Obv.*—Naked youth seated on horse, right, crowning him ; behind him, Nike placing a wreath upon his head ; beneath horse, ΣOKAN NAS .

Rev.—Taras naked, holding kantharos and trident, riding on dolphin, left. $\text{AR. } 6$; wt. 26.8 grs.

This coin is a hemidrachm. There is, in the Museum, a drachm of the same type and bearing the same magistrate's name, but no coin of a smaller denomination.

12. *Obv.*—Female head, left, wearing broad diadem, ear-ring, and necklace.

Rev.—Naked youth seated on horse, right, crowning him ; in field, left, crescent beneath dolphin and TA . $\text{AE. } .7$; wt. 66.7 grs. (formerly plated).

This coin is of precisely the same type as a silver didrachm in the Museum collection, and it is evident that it must at one time have been plated, and in current circulation as a didrachm. It is most unusual to find an ancient plated coin which has lost all traces of the plating.

METAPONTUM LUCANÆ.

13. *Obv.*—Head of Hygieia, right, hair turned up behind and bound with fillet, crossed, the whole within an olive wreath.

Rev.—ME. Ear of barley. $\text{AR. } .85$; wt. 120.5 grs.

14. *Obv.*—Head of Demeter or Persephone, full-face, wearing diadem, wreath of corn, and necklace with large pendants ; above, ΣQTHPIA .

Rev.—META. Ear of barley. $\text{AR. } .85$; wt. 120.9 grs. Pl. III. fig. 5.

The first of these coins belongs to the fine period of art. The legend TYPIEA occurs on certain well-known specimens of precisely the same type.

The second is of later date, and is a good example of

the period of the decline of art. As to the legend ΣΟΤΗΡΙΑ, Millingen remarks (Consid. sur la num. de l'anc. Ital., p. 25), "Au lieu de ΣΟΤΕΙΡΙΑ, l'épithète ordinaire de cette déesse et de sa fille, elle est appelée ici ΣΟΤΗΡΙΑ comme étant le salut de la ville, et identifiée avec Salus, dont les Romains firent une divinité spéciale." Cavedoni (N. I. Vet., p. 80) prefers to consider ΣΟΤΗΡΙΑ as the local form of ΣΟΤΕΙΡΙΑ. Cf. κόρια pro κόρα. Callim. in Dian., v. 233.

METAPONTUM LUCANIE.

15. *Obv.*—Mask, right, hair rolled, and one long lock falling at the side.

Rev.—ME. Barley-corn. Æ. .5.

VELIA LUCANIE.

16. *Obv.*—Head of Pallas, left, wearing Phrygian helmet bound with olive wreath.

Rev.—YEA. Fore-part of lion, left, devouring ram's head; above, ΦΑ. Æ. .85.

17. *Obv.*—Head of Poseidon, left, laureated.

Rev.— . ΑΗΤΩΝ. Owl with wings spread. Æ. .55.

CROTON BRUTTIORUM.

18. *Obv.*—ΚΡΟΤΩΝΙΑΤΑΝ. Eagle with spread wings on laurel branch, left.

Rev.—Tripod with two handles, having conical cover with one handle; in field, left, ear of barley with leaf

Κ
and Φ; right, Ρ and dolphin. Α. .9; wt.
Ε
ΡΜΙ

101.5 grs. Pl. III. fig. 6.

19. *Obv.*—Ο<ΚΣΜΤΑΜ. Herakles naked, seated, left, on rock, covered with lion's skin, holding laurel branch, filleted, and club; behind him bow and quiver; in front, altar laureated.

Rev.—KPOTON (in exergue). Tripod, the cross-bar of which is ornamented with pendent honeysuckle and lotus flowers; in the field, left, Apollo shooting an arrow at the Python, which is coiled and erect in field, right. *Æ.* .9; wt. 121.2 grs. Pl. III. fig. 7.

The letters on the obverse of this coin are archaistic, such as we not unfrequently find on coins of the finest period of art.

CROTON AND SYBARIS.

20. *Obv.*—♀ PO. Tripod.

Rev.—MV (in exergue). Bull, right, looking back; border of radiating lines, the whole incuse. *Æ.* .95; wt. 126.7 grs.

PANDOSIA, BRUTTIORUM.

12. *Obv.*—ΠΑΝΔΟΜ Σ Α. Female head, right (Nymph, Pandosia), wearing broad double diadem, hair in bunch behind, the whole in laurel wreath.

Rev.—River Crathis naked, standing facing with head towards left, holding in extended right patera, and in left olive branch; at his feet a fish leaping up towards the patera: in field, left, ΚΡΑΘ Σ Μ. *Æ.* .85; wt. 104.7 grs. Pl. III. fig. 8.

The position of this town is said by Strabo to be a little above Consentia (vi. 256), an expression which has never been satisfactorily explained. He also calls it *φρούριον ἐρυμνὸν * * * τρικόνυφον δ' ἐστὶ τὸ φρούριον, καὶ παραρρεῖ ποταμὸς Ἀχέρων*. From this description we should conclude that Pandosia was situated on three heights in the immediate neighbourhood of Consentia, a supposition which is confirmed by the occurrence of a personification on this coin of the river Crathis, on which stood Consentia. Geographers are agreed in placing Pandosia on the river Acheron, but they differ as to the whereabouts of that stream, some supposing it to have been an affluent of the Crathis, which flows northwards

into the Gulf of Tarentum, near Thurii, and others making it flow east into the river Neæthus, which empties itself into the sea between Croton and Petelia. The remarkable coin now added to the National Collection settles this doubtful point in favour of the former hypothesis. Livy,¹ in his account of the death of Alexander, the son of Neoptolemos, says that an oracle of the Dodonean Zeus had warned him to avoid Pandosia and the river Acheron, probably in allusion to the lines—

*Αἰακίδῃ προφύλαξο μολεῖν Ἀχερούσιον ὕδωρ
Πανδοσίαν θ' ὅθι τοῖ θάνατος πεπρωμένος ἔστι,*

and that naturally supposing this to allude to the town and river of that name in his native Epirus, and ignorant of the existence of a town and river of the same names in Italy, he had no scruples in accepting the invitation of the Tarentines to pass over into that country to their assistance against the Bruttians and Lucanians. This prophecy was soon afterwards fulfilled, B.C. 326, when he was slain near Pandosia by a Lucanian exile, while in the act of crossing the river Acheron, and his body was carried down by the stream into the camp of the Lucanians, whence they sent its mutilated remains to the town of Consentia, the metropolis of the Bruttians, and afterwards delivered up his bones to their enemies, the Greeks of Metapontum, who restored them to his wife Cleopatra in Epirus. A careful reading of this story leads me to think that the Acheron must have flowed into the Crathis at a point some distance above Consentia, towards which place his body floated down, and not below that town, as is supposed by some. (Smith's "Dictionary of Geography," s. v. Acheron). I should therefore be inclined to place

¹ Livy, viii. 24.

Pandosia on some height near the junction of the Acheron with the Crathis a little above Consentia. The Crathis, as the principal stream, would naturally serve as a type for its money rather than the more insignificant Acheron.²

PANDOSIA BRUTTIORUM.

22. *Obv.*—Head of Hera Lakinia, full-face, towards right, wearing ear-rings, necklace with pendants, and stephanos adorned with honeysuckles and foreparts of griffins placed alternately.

Rev.—[IIAN]ΔΟΣΙΝ Pan naked, seated on rocks, left, holding two spears; beside him, dog; in front, a bearded ithyphallic term of Hermes, holding a filleted caduceus; above, Φ. *R.* .95; wt. 120.1 grs. On the trunk of the term are traces of letters, ΜΑΛΥΣ? Pl. III. fig. 9.

The types of this magnificent didrachm, which are similar to those of the smaller silver coins of Pandosia, are borrowed from the money of Croton, the Herakles on the reverse being here replaced by Pan, recognisable by the Syrix, which is visible upon the rock on some of the smaller specimens in the Museum.

RHEGIUM BRUTTIORUM.

23. *Obv.*—Lion's scalp; above the eyebrows are small circles enclosing three dots.

Rev.—RECINOS. Bearded figure naked to waist, seated, left, on stool holding sceptre; beneath stool, a dog, seated; the whole within a laurel wreath. *R.* 1.2; wt. 267.6 grs.

The lion's scalp on the coins of Rhegium is copied from the coins of the Samians, a colony of whom settled in

² The river Crathis is mentioned by Euripides (Troas, 229),

ὁ ξανθὸν χάϊταν πορσαίνων
Κράθις, ζαθέαις παγαῖσι τρέφων
εὐανδρόν τ' ὀλβίζων γᾶν.

also by Ovid, Met. 15, 315.

Rhegium, after the capture of Miletus by the Persians in B.C. 494. The seated figure on the reverse is generally supposed to represent the $\Delta\eta\mu\omega\varsigma$.

SER . . . Uncertain city of Lucania or Bruttii.

24. *Obv.*—MEP. Bearded Dionysos standing, left, naked, holding kantharos and branch of vine.

Rev.—Branch of vine with leaves and bunch of grapes.

\mathcal{R} . '95; wt. 122.1 grs. Pl. III. fig. 10.

This rare coin is attributed by Sestini to Merusium in Sicily. The Duc de Luynes (*Revue Num.*, 1859, p. 348) has the following note upon it:—"Cette pièce tombée par hasard entre mes mains à Naples, où elle me fut vendue en 1853, par un orfèvre ambulant venu de Calabre, a été publiée par Rasche (*Lexicon totius rei Num.*, t. iii. part 2, p. 8) d'après un dessin que lui avait envoyé Torremuzza. L'identité de la pièce gravée par Rasche avec celle que je possède est évidente. Torremuzza l'attribuait à Meroë de Lycie: Sestini (*Lett.* t. vii. p. 7) la donnait à Merusium de Sicile; mais il est certain que la première lettre est un Σ couché, et non pas un M, dont le dernier jambage est toujours très court sur les pièces archaïques." The Duc de Luynes consequently assigns the coin to the town of Sergention, in Sicily, an attribution which I consider more than doubtful, for Sergention (*Ptol.*, iii. 4, 13) was a town in the interior of Sicily, which, if ever under Greek influence, could hardly have been so at the period during which this archaic coin was struck. The style, fabric, and weight of the piece, as M. Sambon, in his "*Monnaies de la presqu'île Italique*" (p. 339) justly remarks, all point to Magna Græcia, and not to Sicily, and it bears a close resemblance in style to the coins of Kaulonia of the second period when they were struck on both sides. There can be no doubt, how-

over, that the Duc de Luynes is right in reading ΣEP, and not MEP. For the present, therefore, we must content ourselves with the attribution to some town of Lucania or Bruttii apparently commencing with the letters ΣEP.

SICILY.

CATANA.

25. *Obv.*—Head of Apollo, full-face, towards left, laureated ; in field, right, ΗΠΑΚΑΕΙΔΑ.

Rev.—KATANAIΩ[N] (in exergue). *Rev.*—driven by charioteer; above, ΝΑΙΩ, flying, right. *R.* 1; wt 259.6 grs. Pl. IV. fig. 1.

The name ΗΠΑΚΑΕΙΔΑΣ, from the small size of the letters, appears to be the name of the artist, rather than that of a magistrate.

SEGESTA.

26. *Obv.*—ΣΕΛΕΣΤΑΙΑ. Head of Segesta, right, wearing ear-rings and necklace; hair bound with sphen-done, ornamented behind with stars.

Rev.—Akestes, right, naked but for chlamys thrown over left arm, resting his left foot on rock, wearing endromides and Phrygian hat, which has fallen back and hangs over his shoulders, supported by a string round his neck. Over his right shoulder is a strap. He holds in right two knotted javelins. His left rests on his hip. At his feet are two dogs, and before him a bearded ithyphallic term of Hermes. *R.* 1.2; wt. 260 grs. Pl. IV. fig. 2.

The obverse of this beautiful tetradrachm probably represents Segesta, the daughter of Hippotes of Troy, who, that she might not be devoured by the monsters which infested that territory, was sent into Sicily by her father, where she became the mother of Akestes, by the river-god Krimisos, who assumed the form of a dog. The figure on the reverse is doubtless this Akestes, who was the founder of the city of Segesta, and is represented as a

hunter.³ On the remarkable inscription, ΣΕΛΕΣΤΑΞΙΑ, see Friedländer in the Numismatische Zeitschrift for 1870, p. 17.

SYRACUSE.

27. *Obv.*—Head of the nymph Arethusa, full-face, wearing ear-rings and necklace, and with flowing hair, and band across her forehead, on which ΚΙΜΩΝ: in the background, or swimming amid her flowing hair, are four dolphins; border of dots, outside which, at the top of the coin, ΑΡΕΘΟΥΣΑ.

Rev.—ΣΥΡΑΚΟΣΙΩΝ. Charioteer driving quadriga, left; above the heads of the horses, which she touches lightly with her feet, is a winged Nike, running, right, to crown the charioteer. In the exergue is a stalk and ear of barley. *Æ.* 1.2; wt. 266.3 grs. Pl. IV. fig. 3.

This lovely tetradrachm is perhaps the finest of the works of the great Syracusan artist, Kimon, not excepting his renowned decadrachms.

THRACE AND MACEDON.

ABDERA, THRACIE.

28. *Obv.*—ΑΒΑΗΠΙ. Griffin seated on haunches, left, fore-paws raised.

Rev.—ΠΥΘΩΝ. Tripod. *Æ.* .95; wt. 193.7 grs. Pl. IV. fig. 4.

This coin is a didrachm of the Æginetan standard, which appears to have been in use at Abdera for a short period before the adoption of the Persian standard, the didrachms of which weigh about 170 grains. (Brandis, Münz. Mass. und Gewicht's wesen, p. 518.)

³ Virgil, *Æn.* v. 35.

* "At procul excelso miratus vertice montis
Adventum, sociasque rates, occurrit Acestes,
Horridus, in jaculis et pelle Libystidis ursæ:
Troia Crimiso conceptum flumine mater
Quem genuit."

ACANTHUS, MACEDONIÆ.

29. *Obv.*—ΙΧΘΑ. Bull kneeling, left, on left knee, and looking back.

Rev.—Helmet in shallow incuse square. \mathcal{R} . 6; wt. 88.7 grs. Pl. IV. fig. 5.

There can be little doubt that this coin should be attributed to Acanthus. The name Dokimos is probably that of a magistrate, who may have been an ancestor of the celebrated Macedonian general of the same name, who founded the town of Dokimeum in Phrygia.

AMPHIPOLIS, MACEDONIÆ.

80. *Obv.*—Head of Apollo laureated, full-face, turned towards right; in field, right, dog seated, left.

Rev.—ΑΜΦΙΠΟΛΙΤΕΩΝ on a square frame, in the centre of which is a torch: in field, right, A. \mathcal{R} . 1; wt. 220.5 grs. Pl. IV. fig. 6.

A magnificent didrachm of the Macedonian standard, in a perfect state of preservation, and of the finest period of art.

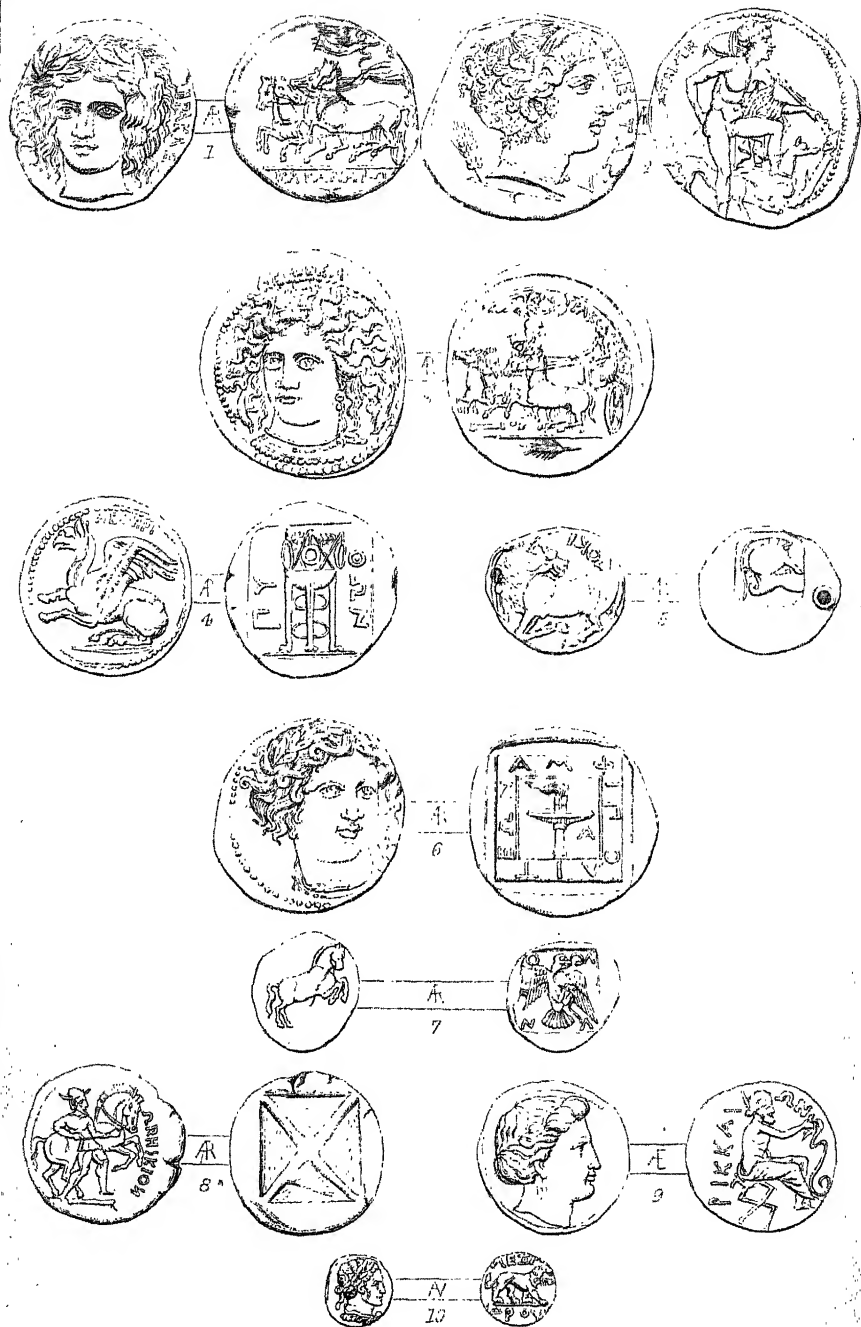
OLYNTHUS, MACEDONIÆ.

81. *Obv.*—Horse galloping, right.

Rev.—ΟΛΥΝ. Incuse square, in which eagle with spread wings devouring serpent. \mathcal{R} . 6; wt. 86 grs. Pl. IV. fig. 7.

This specimen is of an early style, though it cannot be said to be archaic. It belongs to the period when the so-called Macedonian standard was in use throughout this district (Brandis, p. 223). No coins bearing the name of Olynthus are known of the period during which it played so important a part in the political history of Greece. It is, however, probable that some of the coins of the Chalcidean League were struck in this city.⁴ If this be admitted, it would of course account for the absence of any coins of the fine period bearing the name of Olynthus.

⁴ Cadalvene (Pl. I. 28) engraves a small silver coin of the Chalcidean type with the letters ΟΛΥΝΘ round the head of Apollo on the obverse.



H. J. Pearson

GREEK AUTONOMOUS FROM THE
WIGAN COLLECTION.

ORESKII, MACEDONIE.

32. *Obv.*—ΩΡΗ<ΚΙΟΝ. Man, wearing Macedonian kausia and short tunic, holding by the bridle a horse prancing, right.

Rev.—Shallow incuse square divided by diagonal lines.
AR. .85; wt. 153 grs. Pl. IV. fig. 8.

There is a coin of this type in the Mus. de Luynes (Brandis, p. 529). The usual type of the coins of the Oreskii is a Centaur carrying off a woman. These people are supposed to have inhabited the Pangæan mountain range. "In the midst of these mountains," says Leake, "stood the oracular temple of Bacchus, the priests of which were Bessi. Here, probably, the coins of the Oreskii were struck, and from hence emanated that worship of the Mountain Bacchus, which spread over Greece. (Num. Hell. Europe, s. v. Orescii.)

NORTHERN GREECE.

TRICCA, THESSALIE.

33. *Obv.*—Female head, right, hair rolled.

Rev.—ΤΡΙΚΚΑΙΟΝ. Asklepios seated, right, on sella, holding out a bird to a serpent coiled and erect before him. Æ. .8. Pl. IV. fig. 9.

The female head on the obverse is probably Tricca, a daughter of the river-god Peneius, from whom the city received its name (Steph. Byz. s. v.). The reverse type alludes to the famous temple of Asklepios at Tricca, said by Strabo to have been one of the most ancient and illustrious of all the temples of the god (Strab. ix. p. 437). A college of medical priests seems to have been attached to this temple, which was frequented by persons suffering from all sorts of maladies.

ALEXANDER III. (The Great).

34. *Obv.*—Bust of Alexander the Great, laureated, right, as Herakles wearing lion's skin over shoulders, knotted in front.

Rev.—[A]ΛΕΞΑ[N]
ΔΡΟΥ in two lines; between which, lion walking, right. *R.* .35; wt. 18.1 grs. Pl. IV. fig. 10.

This curious little piece of fine workmanship and good art, nevertheless, is not Greek in style, and must be classed with the remarkable gold medallions of the Trésor de Tarse and the small silver pieces. *Obv.*—Head of Alexander, with and without lion's skin. *Rev.*—ΑΛΕΞΑΝ ΔΡΟΥ; lion walking. All these appear to be Roman reproductions, struck, possibly, in Macedon in honour and in commemoration of Alexander the Great by Caracalla or Severus Alexander, of which last emperor Lampridius remarks, cap. xxv. : "Alexandri habitu nummos plurimos figuravit; et quidem electeos aliquantos, sed plurimos tamen aureos." Concerning the gold medallions of the Trésor de Tarse above alluded to, see *Rev. Num.*, 1868, p. 310.

APOLLONIA, ILLYRICI.

35. *Obv.*—Cow standing, right, and suckling calf; above, ΔΑΜΑΡΧΟΣ.

Rev.—ΑΠΟΛ ΑΡΙΣΤΟΚΛΕΟΟ written on the sides of a square, within which are the gardens of Alkinoos. *R.* .7; wt. 51 grs.

36. *Obv.*—Burning hillock; above and below, in two lines, ΑΙ ΝΕΑ.

Rev.—ΑΠΟΛΛΩ ΝΙΑΤΑΝ, in two lines, between which, pedum, left. *R.* .5; wt. 23.5 grs.

37. *Obv.*—Head of Apollo, left, laureated; in front, ΔΡΩΠΙΟΝΟΣ.

Rev.—ΑΠΟΛΑ. Three nymphs dancing, hand in hand, round a burning hillock; in exergue, ΟΙΝΙΑΣ. *R.* .85; wt. 59.8 grs.

38. *Obv.*—Head of Pallas, left, in front ANAPΩNOΣ.

Rev.—ΑΠΟΛΛΩ ΝΙΑΤΑΝ, in two lines, between which, obelisk, on either side of which, in two lines, ΤΙ ΜΗΝ. *Æ.* .6 ; wt. 29·3 grs.

The city of Apollonia rose to great importance during the century before the Christian era, and to this period most of its coins belong. The type of gardens of Alkinoos is borrowed from the coins of its mother city, Corcyra. The burning hillock, or Nymphæum, in the neighbourhood of the city, was sacred to Pan and the Nymphs—whence the pedum on the coins. (Leake, Num. Hell. s. v. Apollonia.) This natural fire is described by Dion. Cassius (l. xli. r. 291) and by Pliny (ii. cvi.).

DYRRHACHIUM, ILLYRICI.

39. *Obv.*—Head of Zeus laureated, right.

Rev.—ΔΥΡ. Tripod, on either side of which, in two lines, ΣΚΥΡ ΘΑΝΑ, the whole in wreath of bay. *Æ.* .75.

40. *Obv.*—Head of Helios, radiated, right.

Rev.—ΠΡΩ, right, above and below, in two lines, ΣΩΣΤΡΙΑΝΟΣ. *Æ.* .6.

Uncertain of ILLYRICUM ?

41. *Obv.*—Barbarous male head nude, right.

Rev.—Figure in military costume standing facing, head turned towards left, resting with left upon spear, and holding in extended right uncertain object ; on either side, ΤΑ ΝΟΣ. *Æ.* .65.

This coin, from its close resemblance in style to those of Ballæus, has been classed to an uncertain King of Illyricum, but judging from the form of the letters, I confess that I have not much faith in this attribution.

PHAROS, INSULA.

42. *Obv.*—Young male head laureated, left.

Rev.—Φ Α. Kantharos. *Æ.* .75 grs.

CASSOPE AND MOLOSSI, EPIRI.

43. *Obv.*—ΚΑΣΣΩΠΙΑΙΩΝ, in three lines, beneath which the mon. $\overline{\text{N}}$: the whole in wreath of laurel.

Rev.—ΜΟΛΟΣΣΩΝ and mon. $\overline{\text{N}}$ in laurel wreath. Æ. 1.

The Molossian territory bordered upon that of Cassope, and at the period when this coin was struck, there may have been but one coinage for the two peoples.

PANDOSIA, EPIRI.

44. *Obv.*—Head of Zeus, laureated, left.

Rev.—ΙΑΝ. Thunderbolt within a wreath of oak.

CENTRAL GREECE.

HERAKLEIA, ACARNANIE.

45. *Obv.*—Head of young Herakles laureated, right, lion's skin tied round throat.

Rev.—ΗΡΑΚΛΕΩ ΤΑΝ. Altar or table composed of the attributes of Herakles, strung bow, quiver, club, &c.; in field, left, uncertain object or mon Δ. Æ. .6.

The type of this coin is very remarkable, and it is with hesitation that I have described it thus:

PHOCIS.

46. *Obv.*—Head of ox, filleted for sacrifice.

Rev.—ΟΝΥ ΜΑΡ ΧΟΥ, in three lines, within laurel wreath. Æ. .6.

DELPHI PHOCIDIS.

47. *Obv.*—Head of negro, right.

Rev.—Ram's head, right, beneath which a dolphin, right; the whole in incuse square. AR. .35; wt. 11.5 grs.

The negro's head is supposed by Numismatists to be that of Æsop, who is said to have been an Æthiopian slave; he was sent by Kroesus to consult the oracle at Delphi, and having irritated the inhabitants by the freedom of his language, was precipitated by them from the summit of a rock.

The ram's head and the dolphin are both symbols of Apollo. The one refers to his pastoral character as protector and leader of the flocks, in which capacity he bore numerous surnames, such as *Καρνέιος*, *Νόμιος*, *Πολυμνιός*. The other is in memory of the tradition according to which Apollo, under the form of a dolphin, conducted Kastalios and his Cretan colonists across the sea to the Gulf of Crissa, in the neighbourhood of which place, at Delphi, they erected a sanctuary to the god under the surname *Δελφίνιος*.

DELIIUM, ? BŒOTIÆ.

48. *Obv.*—Bœotian shield, upon which is a caduceus.

Rev.—Δ I, between the letters a diota, above which is a dot. *R.* .7; *wt.* 90·7 grs.

Delium, according to Strabo (ix. 403.), was a temple of Apollo, and a small town of the Tanagræans, τῶν Ταναγραίων πολίχνιον. The temple is also described by Livy (xxxv. 51). These notices would lead us to suppose that Delium was little more than a village which had grown up round a celebrated sanctuary of Apollo. Leake, who attributes Bœotian silver with Δ I to this town, says that its silver coinage indicates that it must have been a place of some importance. I do not however think this is a necessary consequence, although it is of course quite possible. Professor E. Curtius, in his "Religious Character of Greek Coins" (*Num. Chron.*, 1870), says that the earliest coins were probably issued from the treasuries of celebrated temples, and that, even after the establishment of a coinage, there were territories which had no other unity than that of a common religious worship, and where it was to the interest of the priesthood to cultivate and express this unity, not indeed

merely by common annual and festival ordinances, but also by a district coinage issued from the temple treasury. It seems to me by no means impossible that the coinage of Delium may have been issued from the treasury of the Temple of Apollo. It is, however, extremely doubtful whether these coins should be attributed to Delium at all. Δ I for Δ H is, to say the least, unusual.

ORCHOMENOS BROTIÆ.

49. *Obv.*—Female figure (Atalanta) wearing short chiton and Ætolian hat, which has fallen over her shoulders. She kneels to right on her right knee, her left hand is extended, and her right rests upon the ground; behind her is a dog seated.

Rev.— ION. Aphrodite(?) naked to the waist, reclining left, her head thrown back and looking upwards; at her feet an infant Eros (?) seated left, with arms extended towards Aphrodite. Æ. .75.
Pl. V. fig. 1.

The attribution of this coin to Orchomenos rests apparently upon the evidence of Sestini, who reads OPXOMENION upon a specimen which in other respects appears to be in very poor preservation, for he describes it wrongly, making the obverse Artemis and the reverse Aktæon chained to a rock (Lett., tom. ii. p. 47). I think there can be no doubt that the figure on the obverse is Atalanta (Cf. the coins of Ætolia), and that on the reverse Aphrodite accompanied by Eros.

ATHENS.

50. *Obv.*—Demeter, left, in a winged chariot drawn by serpents. She holds ears of corn.

Rev.—AΘE. Pig, right; beneath, Ξ . Æ. .6.

ELEUSIS, ATTICÆ.

51. *Obv.*—Triptolemos in a winged chariot drawn by serpents. He holds ears of corn.

Rev.—EAEY Σ . Pig, right, standing on torch. In exergue, a pig's head and an ivy-leaf. Æ. .7.

Beulé, in his "Monnaies d'Athènes," remarks that the figure in the car appears to be sometimes Demeter and sometimes Triptolemos; he also suggests that this type may have been borrowed from some celebrated work of art which has not been noticed by historians.

PELOPONNESOS.

ACHÆAN LEAGUE.

52. *Obv.*—Head of Zeus, right, laureated.

Rev.—Monogram of Achaia, above club, right, in field, right, $\bar{\kappa}$; all within laurel wreath, the leaves of which point downwards. \mathcal{A} . '65; wt. 38.7 grs.

ACHÆAN LEAGUE—ASEA.

53. *Obv.*—Zeus Homagyrrios naked, left, holding Nike stephanophoros, and sceptre; behind, $\Xi\text{ENIA}\Sigma$.

Rev.— $\text{AXAION A}\Sigma\text{EATON}$. Demeter Panachaia seated, left, holding wreath and sceptre. \mathcal{A} . '8.

ACHÆAN LEAGUE—TEUTHIS.

54. *Obv.*—Same type.

Rev.— $\text{AXAION TEY}\Theta\text{IAON I}\text{N}\Omega\Sigma\text{EAS}$. Same type. \mathcal{A} . '75.

The first of these coins of the League is of an uncertain mint, the occurrence of coins of Asea and Teuthis proves that these towns continued to exist after the foundation of Megalopolis, to which city the greater part of their inhabitants had migrated.

ELIS.

55. *Obv.*— $\text{I}\Lambda\text{O}$ Eagle with spread wings flying upwards and holding a large serpent in its beak and claws. The serpent, which is coiled round the body of the eagle, is attacking its head. The breast and right wing of the eagle are counter-marked.

Rev.—A Γ . Nike, wearing long chiton, running, right, holding wreath in left, and raising the corner of her chiton with right. The whole in circular incuse. \mathcal{A} . '9; wt. 185.2 grs. Pl. V. fig. 2.

This is a didrachm of the Æginetan standard; it is of the archaic period, and of a good bold style.

ELIS.


56. *Obv.*—F A. Head of Hera, right, wearing stephane.

Rev.—Eagle's head, right, within wreath of laurel. *Æ.* .4;
wt. 13.6 grs.

This obol is of good style, and of a type previously unrepresented in the Museum.

PALE, CEPHALLENIE.

57. *Obv.*—Head of Hermes, right, wearing winged petasos: over shoulder, caduceus.

Rev.—.

The petasos and the caduceus on the obverse are very indistinct.

PRONI, CEPHALLENIE.⁵

58. *Obv.*—Head of Zeus laureated, left.

Rev.—II P, between the letters a pine-cone hanging from a branch with leaves. *Æ.* .65.

SAME, CEPHALLENIE.⁵

59. *Obv.*—Head of Pallas, full-face, wearing Athenian helmet, ear-rings, and necklace with pendants.

Rev.—IIYΘON. Ram walking, right.

MESSENIA.

60. *Obv.*—Head of Demeter, right, crowned with corn and wearing ear-ring.

Rev.—ME. Bunch of grapes with stalk and leaves; in field, right, AI in a small wreath. *Æ.* .7.

LACEDÆMON.

61. *Obv.*—Head of Cleomenes III., left, diademed.

Rev.—A A. Archaic statue, right, wearing helmet, holding spear in upraised right and strung bow in left; at its side a goat, right; in field, left, laurel wreath. *Æ.* 1; wt. 255.5 grs. Pl. V. fig. 8.

This celebrated coin is attributed to Cleomenes III.,

⁵ The above is a wrong attribution: the coin belongs to Clazomenæ. I owe this rectification to Dr. Imhoof-Blumer.

King of Sparta, and is supposed to have been struck circ. 225, after his victory over the Achæans. (See Leake, Lacedæmon.) The statue on the reverse is in all probability that of Apollo Amyclæus, which is described by Pausanias (Lacon., xix. 2), as ἀρχαῖον καὶ οὐ σὺν τέχνῃ πεποιημένον· ὅτι γὰρ μὴ πρόσωπον αὐτῷ καὶ πόδες εἰσὶν ἄκροι καὶ χεῖρες, τὸ λοιπὸν χαλκῷ κιονί ἐστὶν εἰκασμένον. ἔχει δὲ ἐπὶ τῇ κεφαλῇ κράνος, λόγχην δὲ ἐν ταῖς χερσὶ καὶ τόξον. A coin from the same die exists in the Bibliothèque Nationale at Paris. It is in better preservation than this specimen; on the lower part of the statue is an aplustre surmounted by a cock. Visconti supposes that these adjuncts, as well as the goat, may have been added to the statue after the naval victory of Sparta over Athens at Ægospotami, and that they were still there in the time of Cleomenes III., 180 years afterwards. Pausanias does not mention them, but they may have been removed in his time.

ARGOS.

62. *Obv.*—Half-wolf running, left.

ΦΙ ΔΟ

Rev.—Around which Κ Α; beneath, a vase, on which
H Σ

NE; the whole in incuse square. *Æ.* 6; wt. 37·7.

The wolf is the symbol of Apollo Λύκιος, to whom the most splendid of the temples in Argos was dedicated. This temple is said by Pausanias to have been built by Danaos after his strife with Gelanor for the kingdom of Argos, on which occasion a wolf rushed on a herd of oxen that were feeding before the walls and attacked the bull that was the leader of the herd. Hence the Argives likened Gelanor to the bull and Danaos to the wolf, and Danaos being of opinion that the wolf had been sent by Apollo, built this temple to Apollo Λύκιος. (Pausanias, ii. 19, 3.)

63. *Obv.*—Head of Hera, left, wearing stephanos adorned with flowers, and with ear-ring and necklace; her hair falls over her neck; behind, W.

Rev.—ΑΡΓΕΙΩΝ. Diomedes naked but for chlamys, which flies behind him, advancing stealthily to right, carrying the Palladium in his left hand, and a short sword in his right; between his legs N. *Æ.* .75; wt. 81.4 grs. Pl. V. fig. 4.

The head on the obverse is probably that of the statue of Hera Antheia in her temple at Argos. The type of the reverse, Diomedes carrying off the Palladium from Ilium, is adopted by Argos because it was there that he afterwards deposited the image. One of the paintings in the Propylaia at Athens represented the same subject. (Pausan., i. xxii.)

TROEZEN, ARGOLIDIS.

64. *Obv.*—Head of Apollo (?) left, diademed and wearing necklace, hair long.

Rev.—ΤΡΟ. Ornament, top of trident. *Æ.* .5; wt. 81.4 grs.

Leake supposes this head to be that of Apollo Thearios, who had a temple at Troezen, and a statue the work of the Troezenian Hermon. I cannot, however, call to mind a single instance of Apollo represented with a necklace. The trident alludes to Poseidon.⁶

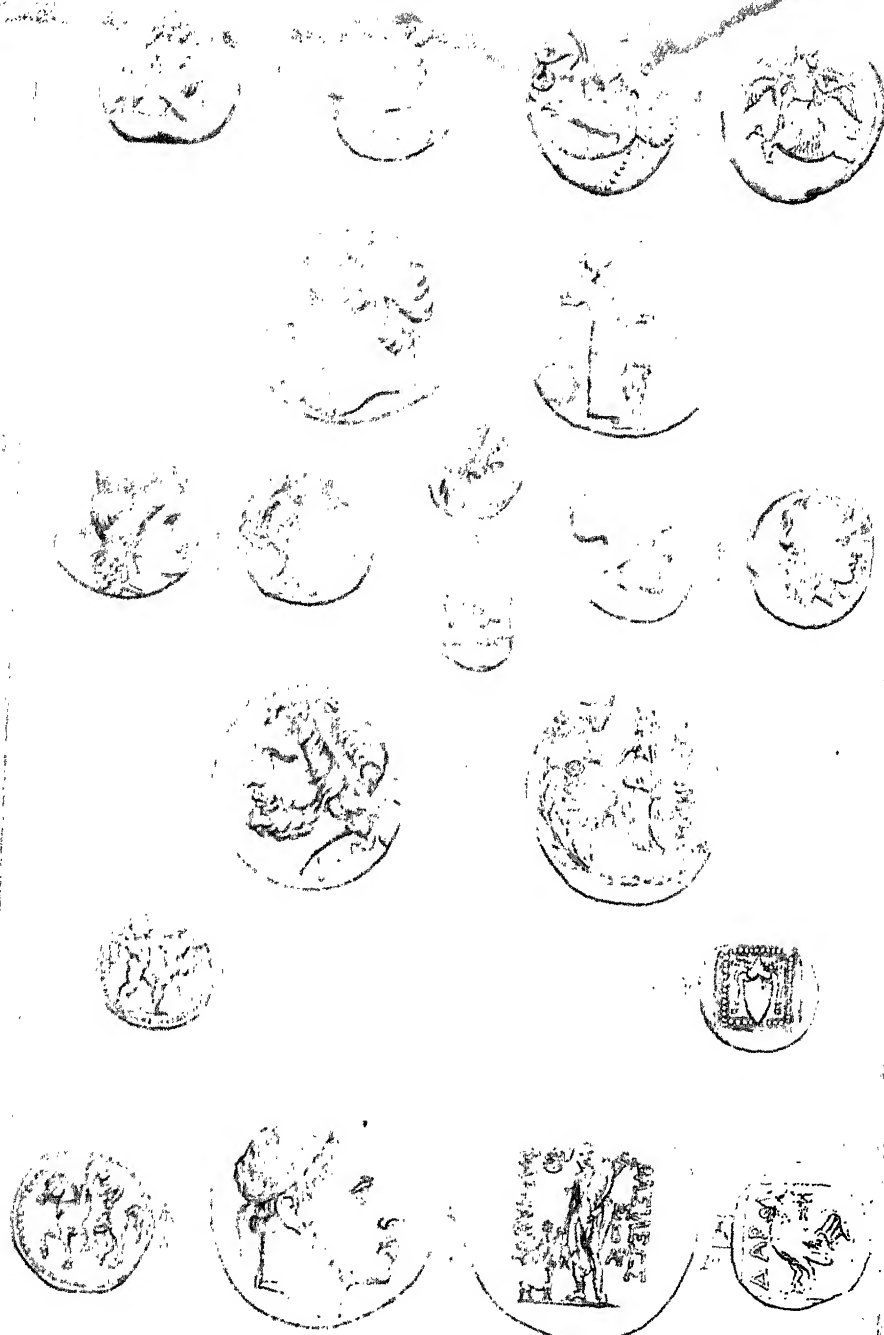
HERÆA, ARCADIA.

65. *Obv.*—Female head, right (Hera?), wearing diadem of beads, hair turned up behind under diadem, over which the ends fall.

Rev.—ΕΡΑ between two plain lines, outside each of which is a line of dots, the whole in incuse square. *Æ.* .6; wt. 87.7 grs. Pl. V. fig. 5.

The ancient city of Heræa was situated on the banks of

⁶ Τροιζήν δὲ ἱερά ἐστι Ποσειδῶνος ἀφ' οὗ καὶ Ποσειδωνία ποτὲ ἐλέγετο. (Strabo, Arg., c. 873.)




GREEK ANTIQUITIES FROM THE
WIDAL COLLECTION

the Alpheios, and on the high road through central Peloponnesos to Olympia. Its Hera-worship may have been imported from Elis, with which place it was closely allied.⁷

MANTINEIA, ARCADIE.

66. *Obv.*—Bear walking, left.

Rev.— in incuse square, divided into two parts by a bar which passes between the letters; in right lower corner a countermark (?) *Æ.* .55; wt. 44.8 grs.

67. *Obv.*—Bearded head, right, wearing Corinthian helmet without crest.

Rev.—MANTI. Head of Apollo, right, with long hair. *Æ.* .8; wt. 87.4 grs. Pl. V. fig. 6.

The nymph Kallisto was metamorphosed into a she-bear by Zeus to conceal her from the jealousy of Hera. She became by Zeus the mother of Arkas, the hero of Arkadia. Kallisto is identified by Müller with the Arkadian Artemis. She was worshipped at Mantinea as the mother of Arkas, whose bones, by order of the Delphic oracle, were transported from Mænalus and deposited in a tomb near Mantinea.

The bearded heroic head on the second coin, which is of much later date than the first, may be intended to represent the mythical Arkas, or possibly Podares, who was slain in the battle against Epaminondas and the Thebans. Pausanias describes his sepulchre at Mantinea, and says that even in his time he was revered as a hero. (Arkad., ix.)

STYMPHALUS, ARCADIE.

68. *Obv.*—Head of young Herakles, right, wearing lion's skin.

Rev.—ΣΤΥΜΦΑΛΙΟΝ (retrograde). Head of one of the Stymphalian birds with small crest; in field, right and left, Τ Υ. *Æ.* .5; wt. 11.2 grs.

⁷ An ancient treaty between these towns inscribed on a bronze tablet is preserved in the British Museum.

Concerning the figures of the Stympthalian birds in the temple of Artemis, at Stympthalus, see Pausanias, *Arcad.*, xxii.

TEGEEA, ARCADIE.

69. *Obv.*—Head of Pallas, full-face, wearing three-crested helmet.

Rev.—Telephos suckled by doe. *Æ.* .65.

70. *Obv.*—Head of Demeter, right, crowned with corn.

Rev.—TEΓEAT. Pallas standing, left, and dropping the hair of Medusa into a vase held up to her by a small female figure (Sterope, the priestess of Athena Alea). Above, mon *℞*, between the figures *Μ*. *Æ.* .65.

Pausanias remarks that the sacred rites of Athena Alea, at Tegea, were celebrated by a young girl (*Arcad.*, xlvii.).

For the story of Sterope and the hair of the Gorgon see Apollodorus, *Bibl.*, ii. 7, 3, who, however, makes Sterope receive the hair of the Gorgon in a brazen vase from Herakles, to whom it had been presented by Athena.

ÆGÆAN ISLANDS.

KYDONIA, CRETÆ.

71. *Obv.*—Young male head, right, with short hair.

Rev.—KY. Dog seated, right, with tail erect. *Æ.* .55.

The young head is probably intended for Kydon, a son of Hermes or Apollo and Akakallis, one of the daughters of Minos; the dog is perhaps a symbol of Artemis, who was worshipped at Kydonia under the name of Britomartis, a Cretan word signifying sweet maid.

GORTYNA, CRETÆ.

72. *Obv.*—Head of Zeus, left, diademed, beneath, Δ.

Rev.—ΓΟΡΤΥΝΙΟΝ ΘΙΒΟΣ. Pallas standing, left, holding wreath-bearing Nike and resting with left upon shield, on which is a Gorgon's head; in front, a serpent coiled and erect; the whole

within an olive wreath. *AR.* .17; wt. 235 grs.
Pl. V. fig. 7.

This remarkable coin affords an interesting example of the influence of Athens in Crete. It is difficult to say on what occasion it was struck. It is certainly later than the series of coins with the type of Europa seated in a tree; for these follow the Æginetan standard, while this coin is struck according to the Attic weight, which seems to have supplanted the older standard not only in Gortyna but in the other cities of Crete. It may be compared with certain other tetradrachms of Gortyna, Hierapytna, Knossus, Kydonia, Polyrhenium, and Priansos, which are thoroughly Athenian, both in weight and type, with the exception of the name of the city and the addition of a secondary type or symbol peculiar to the cities in which they were struck. Whether or not this coin precedes or follows the introduction of a purely Athenian coinage, it is not easy to determine. The obverse type of the head of Zeus links it to the smaller coins of Gortyna, *Obv.* Head of Zeus diademed, right; *Rev.* Naked archer (Herakles) seated on a rock, which are also of Attic weight. I should, therefore, place it, together with these its subdivisions, between the Europa type and the Athenian tetradrachms. The goddess with the serpent and the Gorgon shield can be no other than the Athena of the Akropolis described by Pausanias (*Att.*, xxiv.). Some temporary alliance with Athens is doubtless indicated by the adoption of this type. The legend ΓΟΡΤΥΝΙΟΝ ΘΙΒΟΣ is peculiar, and has given rise to much speculation. (*Vide* G. Curtius, *Grundzüge*, &c., 3rd ed., pp. 467-8.) My first impression concerning it was that it was a Cretan form of ΘΕΟΣ, but on reference to Boeckh I could find no such peculiarity in Cretan inscriptions, although ΘΙΟΣ occurs as a Cretan form of

ΘΕΟΣ. The strangeness of the legend ΓΟΡΤΥΝΙΟΝ ΘΕΟΣ as applied to Pallas or Herakles (for ΓΟΡΤΥΝΙΟΝ ΘΙΒΟΣ also occurs on a drachm in the French collection, with the type of Herakles naked, seated on rocks and holding a bow) also tells against this explanation of the word. I have since learnt, moreover, that this theory has been advanced before, and is not considered a probable Cretan form by etymologists. Another suggestion which I have to offer, and one which I believe has not been advanced before, is to consider the inscription as analogous in meaning to the famous ΣΕΥΘΑ ΚΟΜΜΑ, ΣΕΥΘΑ ΑΡ ΓΥΡΙΟΝ and to the archaic legend ΑΥΙΛΑ ΟΤ ΜΟΙΥΤΙΟΛΑ on a coin of this very town, Gortyna, in the collection of the late General Fox. This latter inscription has been read by M. François Lenormant as ΓΟΡΤΥΝΟΣ ΤΟ ΠΑΙΜΑ. He supposes *παῖμα* to be a substantive derived from *παῖν*, to strike, as *κόμμα*, from *κόπτειν*, the signification of both these words being something struck, and so, "a coin." I therefore throw out as a possible explanation of ΘΙΒΟΣ that it may be a peculiar Cretan form of *τύπος*, which stands in the same relation to *τύπτειν* as *κόμμα* and *παῖμα* to *κόπτειν* and *παῖν*: thus ΓΟΡΤΥΝΙΟΝ ΤΥΠΙΟΣ would in fact be a modern rendering of ΓΟΡΤΥΝΟΣ ΤΟ ΠΑΙΜΑ. Whether it is possible for *θίβος* to be a Cretan form of *τύπος*, I do not know; the *τ* would have to be replaced by its corresponding aspirate form *θ*, and the labial *β* would have to be substituted for the labial *π*, while the vowels *ί* and *ύ* would also have to be interchanged. Schleicher gives examples of *ί* for *ύ* in his Compendium, 3rd ed., 1871, p. 66, Anm. 2. *θ* for *τ*, and *β* for *π*, do not seem to me impossible dialectic changes. I confess I can find no such examples in Boeckh, although he gives *χ* for *κ* (No. 2,556), and I therefore leave the possibility or probability of such changes, both in consonants

and vowels, to be decided by etymologists. To my mind, the chief argument against the reading ΓΟΡΤΥΝΙΩΝ ΤΥΠΟΣ exists in the comparative lateness of the style of art, for the coin clearly belongs to a period when such a legend would, to say the least, be improbable. The only other alternative is to consider ΘΙΒΟΣ as simply a magistrate's name, and as such it would doubtless have been generally accepted had it not been for the strangeness of such a proper name. W. H. Roscher, however, in an article on this subject in Curtius' Studien zur Griechischen u. Lateinischen Grammatik (Band ii., Heft i., pp. 154-5), gives a list of names to which Θίβος might be related, such as Θίβ-ρ-ων (Θιμβρων) and Θίβραχος.

RITHYMNA, CRETÆ.

73. *Obv.*—Head of Pallas wearing Corinthian helmet, right.

Rev.—I P between the prongs of a trident. Æ. .4.

EUBCÆA.

74. *Obv.*—Head of Demeter veiled, right.

Rev.—ΕΥΒΟΙΕΩΝ. Bull butting, right; above, a trident.
Æ. .7.

75. *Obv.*—Head of Hermes, right, wearing petasos; behind shoulder, top of caduceus.

Rev.—ΕΥΒΟΙΕΩΝ. Ear of barley. Æ. .45.

CARYSTUS, EUBCÆA.

76. *Obv.*—Head of Demeter veiled, right.

Rev.—^{KA}
PY. Dolphin, right.

CARTHÆA CECÆ.

77. *Obv.*—Bunch of grapes with leaf on either side.

Rev.—Head of Herakles, left, wearing lion's scalp. The whole within a dotted incuse square. Æ. .95;
wt. 256 grs.

This coin is a tetradrachm of the Attic standard, which

must have been adopted by the island of Ceos soon after its introduction by Solon at Athens early in the sixth century B.C. The smaller coins with the same obverse type, but with an incuse reverse with no type, are earlier, and follow the Æginetan standard.^s

GORESIA CEE (?)

78. *Obv.*—Two naked Archaic male figures wrestling, their right arms raised with lokythi hanging from them by strings.

Rev.—Cuttle-fish or beetle (?) in an incuse square, within which a frame consisting of a line of dots between two plain lines. *Æ.* .6; wt. 62 grs. Pl. V. fig. 8.

This unique drachm, if it be of Goresia at all, which I think very doubtful, marks the transition at this town also from the Æginetan to the Attic standard. The style of the obverse reminds us of some of the early coins of Macedon.

CIMOLUS INSULA.

79. *Obv.*—Star.

Rev.—KI. *Æ.* .45.

The type of the star Sirius is probably borrowed from the neighbouring Ceos, where Aristæos was worshipped as the averter of the heat of the dog-star, and the bringer of the cool breezes, Etesiaë, which blow for a fortnight in July and August over the entire Archipelago. (Preller, *Gr. Myth.*, i. 358.)

MELOS INSULA.

80. *Obv.*—ΕΗΙ ΤΙ ΠΑΝΚΑΕΟΞ ΤΟ Γ. Pomegranate.

Rev.—ΜΗΑΙΩΝ. Palladium, right, holding spear and shield. In field, right, ΙΙΙΙ. *Æ.* .95.

MYCONOS INS.

81. *Obv.*—Head of young Dionysos, full-face, towards right, crowned with ivy-wreath, which hangs down on each side of his neck.

^s This coin is attributed by some to Trapezus.

MYK
Rev.—O NI. Two ears of barley growing on one stalk.
 Ω N Æ. .65.

ASIA MINOR.

LAODICEIA, PONTI ?

82. *Obv.*—Ægis, with head of Gorgon in the centre.

Rev.—ΛΑΟΔΙ ΚΕΩ Nike, right, carrying filleted wreath and palm, in front, Æ. .75.

I can find no mention of any town of this name in Pontus, but the types both of the obverse and reverse, which are precisely those of Amisus and other Pontic cities, compel us to suppose that a town called Laodiceia must have existed in this district.

PHARNAKES I., PONTI REX, B.C. 184—157.

83. *Obv.*—Head of Pharnakes diademed, right.

Rev.—ΒΑΣΙΛΕΩΣ ΦΑΡΝΑΚΟΥ. Divinity standing full-face, wearing petasos, chiton, chlamys which hangs behind him, and cothurni. He holds in left a cornucopiæ and caduceus, and in right a branch of vine, on which a doe is feeding. In field, left, crescent and star; right, mons. Μ, Β, ΑΡ. Æ. 1·2; wt. 262·4 grs. Pl. V. fig. 9.

M. Waddington in a paper on the Amasia find (*Rev. Num.*, 1863, p. 217), describes a specimen similar to this one. He is unable to assign a name to the divinity on the reverse, which some have endeavoured to identify with Mên, to whom a celebrated temple at Kabira was dedicated.

POLEMON II. AND NERO, year 24.

84. *Obv.*—ΒΑΣΙΛΕΩΣ ΠΟΛΕΜΩΝΟΥ. Head of Polemon II., right, diademed.

Rev.—ΕΤΟΥΟ ΚΓ. Head of Nero, right, wearing wreath of laurel with berries or olive (?) Æ. .7; wt. 56·8 grs.

BOSPORUS. Rhescuporis I. and Tiberius, A.D. 13—16.

85. *Obv.*—ΤΙΒΕΡΙΟΥ ΙΟΥΛΙΟΥΣ ΒΑΣΙΛΕΥΣ ΠΗΚΟΥ-ΙΟΠΗ. Rhescuporis standing, right, placing

his foot upon a kneeling captive, and raising his right hand to his face; behind him another kneeling captive, and in front a trophy.

Rev.—MH within laurel(?)—wreath with berries on long stalks. Æ. 1.1.

Leake says the letters MH are the numerals 48, and mark the value, as IB (12) and KA (24) also occur.

AULARI PONTI aut PAPHLAGONIÆ.

86. *Obv.*—Young male head, right, wearing crested helmet.

Rev.—ΑΥΛΑ PQN. Parazonium with strap, right; in field, left, Ω. Æ. .85.

This coin is published in Mionnet (Suppl., iv. 565). It is of considerable rarity. I find no mention of this town in the geographical dictionaries.

CROMNA, PAPHLAGONIÆ.

87. *Obv.*—Female head, left, wearing necklace and stephanos with floral ornament and surmounted by three turrets.

Rev.—^{KP}ΩM Diota, above which bunch of grapes. Æ. .55.

It is supposed that the female head on the obverse represents the Amazon Cromna, the founder of the town.

SINOPE, PAPHLAGONIÆ.

88. *Obv.*—Head of nymph Sinope, left, wearing ear-ring and necklace, hair in sphendone.

Rev.—Eagle flying, left, with dolphin in its claws, above ΑΠΘ; below eagle†P; beneath, ΔΑΤΑΜΑ. Æ. .7; wt. 90.9 grs.

This remarkable coin of Sinope is the only Greek coin of this city that I know of which does not bear the name of the city. There are two coins of Sinope in the Museum with the name of an uncertain satrap in Phœnician characters (De Luynes, Num. des Satrapies, &c., Pl. v. No. 4). The present specimen must have been struck under the rule of Datames, the satrap of Cilicia, after he had reduced

to subjection Thyus of Paphlagonia, who had revolted from Artaxerxes Mnemon.

MYRIA, PERGAMUS, King.

89. *Obv.*—Head of Philetærus, right, laureated, hair curly over forehead.

Rev.—ΦΙΛΑΕΤΑΙΡΟΥ. Pallas armed, seated, left, holding wreath in right; behind her a strung bow, and shield with Gorgon's head upon it; in field, left, standard and mon. $\hat{\Phi}$. \mathcal{A} . 1.25; wt. 254.8 grs.

The attribution of the series of the kings of Pergamus has never been satisfactorily determined. The above specimen was assigned by Mr. Wigan to Attalus III., upon what grounds I do not know.

PIONIA, MYRIÆ.

90. *Obv.*—ΠΙΟΝΙΤΩΝ. Bust of Pallas, right, wearing crested Corinthian helmet.

Rev.—ΕΙΛΑ ΟΥ ΠΕ ΡΚΟΥ ΠΙΟΝΙ (in exergue). Tetra-style temple with dot in pediment, within the temple an uncertain statue. \mathcal{A} . .65.

Pionia, under the Romans, was included in the district of Adramyttium, which was a *conventus juridicus* of the province of Asia. Lupercus was probably a member of the Gallia family. (Cf. the coins of C. Gallius Lupercus, who was one of the monetary triumvirs under Augustus, B.C. 9.)

PROCONNESUS INSULA.

91. *Obv.*—Female head, right, wearing necklace, hair enclosed in a net.

Rev.— $\frac{\text{ΠΠΟ}}{\text{ΚΟΝ}}$. Dove standing, right; in front, cenochoë, right; behind dolphin, downwards, left. \mathcal{A} . .55.

This type is remarkable, and has not, as far as I am aware, been explained.

ALEXANDRIA, TROADIS.

92. *Obv.*—COL. Branch divided into three and filleted.

Rev.—TPO. Bird, feeding from circular altar. Æ. 5.

DARDANUS, TROADIS.

93. *Obv.*—Naked figure with double plume (?) head-dress, riding on horseback, left.

Rev.—ΔAP. Cock standing, left, above Ξ, the whole in incuse square. Æ. .75; wt. 72.7 grs. Pl. V. fig. 10.

This coin is attributed to Mania, the wife of Zenis, satrap of Æolis under Artaxerxes Mnemon, by the Duc de Luynes, *Num. des Satrapies*, p. 48. He describes the figure on horseback as female, and supposes it to represent Mania herself. He acknowledges, however, that it must have been struck during the lifetime of her husband Zenis, whose monogram, Ξ, it bears. His attribution to Mania rests, therefore, upon the supposition that the figure on horseback is female, and upon the fact that it was struck at Dardanus, which she appears to have made her headquarters after the death of Zenis. I confess that neither of these arguments seems to me to be of great weight, as we have no evidence that Zenis himself did not strike money at that city.

SKEPSIS AND DARDANOS.

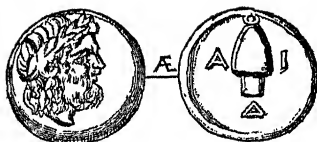
94. *Obv.*—OKHΨ[Ι]ON. Bust of Serapis, right, wearing modius and richly-ornamented garment, left hand raised, right holding vase; border of dots.

Rev.—OKI ΨI — ΔAP. Horseman, right, galloping, wearing chlamys and cothurni, and thrusting with a long spear, which he holds in his raised right hand. Æ. .75.

This coin is of a late period. Mionnet, tom. ii. p. 669, No. 251, publishes a coin from the cabinet of M. Cousinery, which would seem to bear much resemblance in type to the present specimen, with the singular exception that the bust on the obverse is that of a woman.

BARCLAY V. HEAD.

(To be continued.)



VII.

NOMISMATA τῆς ΝΗΣΟΥ ΑΜΟΡΓΟΥ καὶ τῶν τριῶν αὐτῆς
πόλεων ΑΙΓΙΑΛΗΣ, ΜΙΝΩΑΣ καὶ ΑΡΚΕΣΙΝΗΣ. Ὑπὸ
ΠΑΥΛΟΥ ΛΑΜΠΡΟΥ . ΑΘΗΝΗΣΙΝ . 1870.

THE little island of Amorgos, one of the Sporades, lying to the south-east of Naxos, has not hitherto contributed much to numismatic history; nor indeed to history of any kind; except in so far that the iambic poet, Simonides, is by some said to have been born in the island, though according to others he was a native of Samos, and merely led a colony to Amorgos; and that the island was famous for the manufacture of a peculiar kind of fine linen, much affected by the ladies of Athens and Corinth. It was also considered rather an agreeable place of exile.

Goltz indeed published a coin of Amorgos in gold and silver (Insul. Tab. xxii.); and, after him, Pellerin a similar one in brass (Rec. iii. 27, 266); on which Eckhel (ii. 325) caustically remarks that the art, so anxiously sought after by others, was known by Goltz, namely, that of turning vile brass into the nobler metals.

The coins of Amorgos *in genere* are very rare. K. Lampros, in the interesting and exhaustive pamphlet

which stands at the head of this paper, mentions only two, one from Cadalvene (*Rec. de méd. gr.inéd.*, p. 221, Tab. iii. No. 16), the other from Mionnet (*Supp.*, tom. 4, p. 367, No. 1), both different from those mentioned by Goltz and Pellerin. Messrs. Rollin and Feuarent, in their catalogue, 1864, give a coin which is thus described: "4270 .Casque ou bonnet, de forme conique. *Rev.* AMO. Mouche."¹

It is, however, with reference to a peculiar type occurring frequently on the coins of Aigialê, one of the cities of the island, and occasionally on those of other places, that the present paper is written. M. Cadalvene (*Rec.*, p. 226) appears to have been the first to call attention to this symbol, which Mr. Borrell afterwards (*Num. Chron.*, v. 173) described more fully as "resembling a vase without handles, reversed, a ring instead of a foot, as if it were intended to be suspended."



Neither of these learned Numismatists could make anything of it; though the former, from finding it often associated on coins with a serpent, and occurring also as an adjunct on coins of Epidaurus² surmised that it was some sacred vessel which was suspended in the temples of Asklepios.

Mr. Borrell's paper, on this and other unedited Greek coins, was read before the Numismatic Society on the 26th May and 24th November, 1842; and in the same vol. of the *Num. Chron.* (p. 193) appeared another paper

¹ The reverse is similar to that of the coin described by Mionnet, except that he gives no legend. K. Lampros suggests that the insect is a bee. The coin is no longer in the collection of Messrs. Rollin and Feuarent.

² See Cadal. pl. iii., No. 17. See also Combe, *Cab. Hunter*. Tab. xxvi., No. 12.

"On the type of Aegiale and Epidaurus," by Mr. Birch, who examined the subject at greater length.

He says that the object in question, "never satisfactorily elucidated by any one who has described these coins, is illustrated by a monument of Jason, a physician, published by M. Panofka, in his 'Antiquités du Cabinet de Pourtalès Gorgier' (fol. Paris, 1834, pl. xxxv.), where this very instrument is represented by the side of the patient whom Jason is curing." This monument is now in the British Museum. The "instrument," as is usual in ancient works of art where an adjunct is employed as a type of the profession or occupation of a person, is out of all proportion to the two human figures. This instrument, Mr. Borrell continues, "is a utensil of the sudorific bath, called *Laconicum balneum*, or Laconian bath, which was a vaulted room, with the fire of the *hypocaustum* laid in tiles, with spaces beneath the floor. The heat of the apartment was regulated by an aperture in the roof, beneath which was suspended this *clibanus*, or cover, called by Vitruvius (lib. v., ed. of Marini, fol., Rome, 1836, pl. xcii. 5) an *aeneus clypeus*, and by Timarchus, as cited by Athenæus, in the *Deipnosophistæ*, the χαλκοῦς ὀμφαλὸς (cited Marini, n. 21, p. 309, vol. i.), 'the brazen omphalos,' or 'navel.' It was raised or lowered by a cord attached to the ring at the apex, and the heat of the bath thus regulated."

Mr. Birch proceeds to discourse very learnedly on the *omphalos*; but there can be little doubt that he was mistaken in supposing that this was the utensil represented on the coins and on the monument of Jason.

It seems to have been reserved for K. Lampros, or rather for his son Ioannes, to discover the significance of this mysterious symbol. During a visit which they paid

to Italy in 1869, the latter noticed in the Museum at Naples six or eight small brazen instruments, of exactly the same shape as the symbol on the coins of Aigialê. On inquiry, he ascertained that these were cupping instruments, which had been found at Pompeii. This instrument, which is called *Σικύα* or *Σικύια* in Greek, ancient and modern, and *cucurbita* in Latin, a word meaning primarily *a gourd*, from its likeness in shape to that plant, is represented in *Ceci* (*Piccoli bronzi del Museo Nazionale di Napoli*; Tav. vii. No. 29). There is a specimen in the British Museum, (Bronze Room, Wall Case 32), which came from Corfu. It is exactly like the specimens on the coins, except that it wants the suspending ring; this accessory, indeed, is not present in all instances on the coins. In the Medal Room are two coins of Aigialê, bearing the symbol in question, and which are like two of those figured by K. Lampros. The instrument, though frequently made of glass or of bone, was sometimes of brass,³ or even silver,⁴ though these latter, together with other costly instruments, were chiefly used, it seems, by unskilful physicians as a means of favourably impressing their patients.⁵

The head on the obverse of most of these coins, which had

³ *Nikandros*, *Θηριακά*, 5, 921; *Celsus*, II. 11.

⁴ *Loukianos*, *Πρὸς τὸν ἀπαίδευτον κ.τ.λ.* Κεφ. 29. All these references are from K. Lampros. Our brother member, Mr. Percy Gardner, has kindly referred me to two passages in Aristophanes, where a similar instrument is spoken of as a *κνᾶθος*: ὑποπιασμένοι | ὑπαξάσασαι (αἱ πόλεις) καὶ κνᾶθους προσκείμενοι. (*Εἰρηνη*, 523, 4.)—εἰ τ' ἄρα . . . τὴν χεῖρ' ἄκραν | ταύτῃ προσοίσεις, κνᾶθον αἰτήσεις ταχα. (*Λυσιστρατη*, 443, 4. Ed. Bekker, Lond. 1828. See the notes on these passages.

⁵ *Οἱ ἀμαθέστατοι τῶν ἰατρῶν . . . ἐλεφαντίνους νάρθηκας καὶ σικύας ἀργυρὰς ποιοῦμενοι καὶ σμίλας χρυσοκολλήτους.* It may not perhaps be uncharitably surmised that a young physician in our own days sometimes sets up a carriage from similar motives.

been taken by M. Cadalvene and others for that of Zeus, is, as pointed out by Mr. Birch, certainly that of Asklepios.

It is to be regretted that no representation of the coins of Aigialê bearing this peculiar symbol was given either by the last-named gentleman or Mr. Borrell. K. Lampros, in the little work whose title stands at the head of this paper, has given representations of nine, one of which is copied at the head of this paper; also one of Atrax, a city of Thessaly; five of Epidaurus, two of them belonging to the Achæan League; all having the symbol in question; also a remarkable tetradrachm of Alexander the Great, from the collection of M. Prokesch-Osten, which bears the *σικύα* as an adjunct in the field.

T. J. ARNOLD.

LONDON, *April*, 1873.

VIII.

ON A COIN OF ANTONINUS PIUS.

M. COHEN describes a first brass coin of Antoninus Pius thus :—

827. *Obv.*—ANTONINVS AVG. PIVS P. P. IMP. II. La
tête laurée à droite.

Rev.—SECVND. DECEM ANNALES COS. IIII. S. C.
dans une couronne de chêne.

With reference to the date and significance of this coin I propose to make a few observations.

Before doing so, however, it may be as well to say something briefly on the subject of the Decennial Vows, with the object of making the matter intelligible to those who have not made Roman coins a special study; and this, it may be trusted, will be excused by those who are more conversant with the subject.

Decennial vows—*Vota decennalia*—were instituted, it appears, at the commencement of the Empire. In v.c. 727 (B.C. 27), when Octavius Cæsar first took the name of Augustus, among the various devices by which he sought to blind the Roman people and induce them to believe he had no wish for monarchical power, was his acceptance of the government of certain provinces for the limited period of ten years. The year before this term was completed, v.c. 736 (B.C. 18), he again accepted an *imperium* for five years; and that period having expired, for another five

years. Then, in v.c. 746 (B.C. 8), he accepted a decennial *imperium* for the third time; in v.c. 756 (A.D. 3) for the fourth time; and in v.c. 766 (A.D. 13) for the fifth and last time, as in the next year he was deified.

This decennial ceremony, which was in fact but a form in the time of the first Emperor, was kept up as the mere shadow of a form by his successors. There was no longer any pretence for a limited acceptance of empire, but under each reign decennial festivals were celebrated at which vows were made (*vota suscepta*) for the welfare of the Emperor; at the expiration of this term these vows were considered to have been kept (*soluta*), and fresh ones were made for another period of ten years.

The first mention of these *Decennalia* on coins occurs in the reign of Antoninus Pius; they recur at intervals on those of succeeding Emperors; and in the Lower Empire take the common but somewhat puzzling form of VOTIS X MVLTIS XX and the like.¹

Those who wish to go more fully into this matter should consult Eckhel, *Doctr. Vet. Num.*, vol. viii. Obs. Gen. cap. xiv. *De numis Votorum*.

To return to the coin under consideration. It is rather curious that it is not referred to by Eckhel in his enumeration of the coins of Antoninus; though he mentions others that speak of the *Decennalia*; and this omission is the more remarkable as the coin is described by previous Numismatists; notably by Spanheim, *De Præst. et Us. Numism.* Ed. 4to., 1671, p. 875.

M. Cohen attributes the coin with a (?) to the year v.c. 910 (A.D. 157), and adds in a note that as the first decennial

¹ The word *multis* is understood to imply a prayer for the long life of the Emperor.

vows were dated in the 10th tribunitial power of Antoninus which answers to v.c. 900 (A.D. 147), he supposes that the second would be made ten years afterwards, and therefore in the year he has given.

But he is in error as to the year of the first *Decennalia*, which took place in the 11th tribunitial power of Antoninus, as indeed M. Cohen shows himself in No. 752, which he thus describes:—

Obv.—ANTONINVS AVG. PIVS P. P. TR. P. XI. Sa
tête ou son buste lauré à droite.

Rev.—PRIMI DECENNALES COS. IIII. S. C. dans une
couronne de chêne (901; de J. C., 148). See
also Eck., vii. 18.

The first *Decennalia* would therefore be *soluta*, and the second *suscepta* in that year (A.D. 148); and the second would be *soluta* v.c. 911, A.D. 158, answering to the Trib. Pot. xxi. of Antoninus.

There is, however, no coin extant showing the solution of the second Vota Decennalia in the latter year; Eckhel indeed says,

“Ex præscripto primi decennii vota . . . nuncupanda fuere in ejus trib. potestate xxi., et revera Norisius commemorat numum cum hoc tribunatu, cui soluta hæc vota testatur esse inscripta, sed quem alibi laudatum non reperio.” vii. p. 25.

Eckhel gives, however, two coins in the following year, the 22nd of the Trib. Pot. of Antoninus; which are also given by M. Cohen, whose description, for the sake of uniformity, may as well be adopted:

977. *Obv.*—ANTONINVS AVG. PIVS P. P. TR. P. XXII.
Sa tête laurée à droite.

Rev.—Même revers (que 975 sc.) VOTA SOL. DEC. II.
COS. IIII. S. C. (VOTA SOLuta DECennalia II.)
Antonin debout à gauche, tenant une patère, au-
dessus d'un trépied allumé et un livre; à terre
une victime.

984. (Same Obv.)

Rev.—VOTA SVSCEP. DECENN. III. COS. IIII (VOTA SVSCEPTA DECENNALIA III., &c.)—(with a similar type.)

And a coin with similar legends and types as the last mentioned is given in the following year. (Eck, vii. 26; Coh., 982, 3.)

The type of the Emperor sacrificing appears to be that which was always afterwards adopted in coins commemorating the Decennial vows till we come to those of the Lower Empire.

The question now to be considered is whether the coin, with the legend SECVND. DECEM ANNALES, was struck, as M. Cohen considers, at the conclusion of the second *Decennalia*, so as to signify *Secunda Decennalia Soluta*. I would venture to suggest that it was not; but that it was issued in the same year with that bearing the legend *Primi Decennales*, which certainly means *Prima Decennalia Soluta*; and that its meaning is *Secunda Decennalia SUSCEPTA*; and for these reasons:—

1. The type—the mere legend inclosed in an oak-wreath—is the same as that of the *Primi Decennales*.

2. The legend—*Decem Annales*—is evidently more primitive than that of *Vota Decennalia*, which is adopted in all later coins, and—

3. It seems highly improbable that a coin with these types and legends would have been issued in the same year with those bearing the type of the Emperor sacrificing and the legends *Vota Soluta Decennalia Secunda* and *Vota Suscepta Decennalia Tertia*.

The coin therefore was most probably struck in the eleventh tribunitial power of Antoninus, v.c. 901. A.D. 148.

T. J. ARNOLD.

LONDON, Feb., 1873.

IX.

NOTES ON THE ANNALS OF THE COINAGE OF SCOTLAND.

No. V.

EVERYTHING connected with the reign of the unfortunate Mary of Scotland possesses a melancholy interest. History is very often lenient when a tragic fate closes an unfortunate career. Time has softened the dark shadows which rest on too many events of her life; and while we remember her beauty, her temptations, and her misfortunes, we forget her errors and her faults.

It is not surprising, therefore, that the coins of this reign possess for collectors a value altogether above what, under ordinary circumstances, we might expect. Causes, which shall be immediately adverted to, combined to render the native mint less active during the present reign than it had been before; and, consequently, though there is a great variety of type, the coins themselves are in most cases far from common, and in many excessively rare. It must also be remembered that those struck during the French alliance have a place in that series, and are eagerly sought after on the other side of the Channel.

It unfortunately happens that of many of the coinages no authentic documentary evidence can be found; but as,

with a few exceptions, the dates are given on the coins, it is always easy to trace the consecutive history of the money.

In the present paper a considerable amount of hitherto unpublished material, derived from a recent search through the MS. Acts of the Privy Council, the accounts of the Lord Treasurer and other records, is given for the first time.

1543. The first date which occurs on any coin of this reign is 1543, found on the very rare gold half-lion, with the legend, "Ecce Ancilla Domini." Of this coinage no record can be discovered. It is probable that the écu, from its similarity to the same type of James V., was minted at an early period in the reign, and most likely immediately after her accession. Bishop Nicolson mentions that Mr. Sutherland¹—the founder of the fine collection of Scottish coins lately in the Advocates' Library in Edinburgh, but now belonging to the Scottish Antiquarian Society—had seen a pattern écu of Mary's similar in size and weight to that of James V.² But this piece, if it ever was in Mr. Sutherland's collection, is not now known to exist.

1544. At this time it appears, from an indenture preserved in Rymer's *Fœdera*,³ that one English pound was equal to four Scottish pounds; for in a contract entered into between Henry VIII. and the Earl of Lennox, in 1544, it is expressly declared that 6,800 merks Scottish shall be held to be equal to 1,700 merks sterling money of England.

One of the causes alluded to above for the comparative scarcity of the native coinage during this reign will be

¹ Scottish Hist. Library, p. 301. ² Lindsay, Pl. xii. fig. 36.
³ xv. p. 29.

found in the quantity of French and other foreign money which was authorised to be current in the country.

1545. As early as 1545 we find, from the registers of the Privy Council,⁴ that foreign money was to be a legal tender at the following rates, viz. :—The “testoon of the King of France is to be taken for 5*s.* 6*d.*, the “sous” for sixpence, the “carolus” for fivepence, with the parts in proportion. A short time after the double ducat of Spain is to have course for forty-eight shillings. And it is curious to observe that, while every encouragement was given to facilitate and authorise the coinage of France, an exactly opposite course was observed in the case of England. For in the same year and month it is minuted in the Privy Council Register that the “New Inglis grote of England, callit the grote with the braid face is universale for xvij*d.* Howbeit the samyn grotis ar nocht siluir and ar fals for the mare part,” wherefore, they are forbidden to have any course in the country.

1547. The Privy Council met at Glasgow on the 1st of May of this year and, among other matters which are recorded, it is stated that “my Lord gouvernour and lordis of secrete counsale understand perfittlie that the fyne cunzeit siluer sik as the xiiij*d.* grote is commonelie had furth of the realme and neur brocht agane within the samyne, and uther cunze na fyne siluer, bot for the maist parte copper hes passage amangis our souerane ladyis liegis, sik as the grote callit the bagcheik, and to the effect that the fyne cunzeit siluer may remane in this realme,” it is ordered that the “*bagcheik*,” which at the time of the order was current for sixteenpence, shall in all time coming have course for twelpence only.

⁴ MSS. in the Register House at Edinburgh.

Immediately after this ⁵ a coinage of twelve stone weight of silver was ordered to be struck into pennies and half-pennies—"of the syes and wecht of the penny past of auld in this realme." As the amount of alloy is not stated, it is not easy to say exactly what coins are here meant. The billon pennies with the portrait have no date, and are similar in size and weight to those of the James's; ⁶ and possibly this may be the time when they were minted.

1548. From an entry in the Treasurer's account,⁷ it appears that twelve hundred pounds were received in 1548—"a Willelmo Hamilton de Sanchore milite pro proficim cone sibi assedate"—and similar receipts from William, Commendator of Culross, are found in 1549 and 1550.

1550. In July, 1550,⁸ the Lord Governor and Lords of Secret Council, understanding that "the clippit sowsis and clippit carolus ar cryit down in France," and that "divers merchandis of this realme that hes boicht all the clippit sowsis and carolus that thai mycht get be the pund and stannis wechtis, and brocht the samin in this realme tending to caus the samin haue passage amangis our souerane ladye's legis, and tharethrow to gett the gold and siluer of this realme and to have the samin furth to uther realmis and cuntreis, to the grit apperand hurt of our souerane laydis legis and common wele"—and they accordingly declare that it shall be illegal for any one to give or receive the aforesaid under the pain of death and confiscation of goods.

⁵ 3rd May, 1547. MSS. Reg. Sec. Con., Register Ho., Edin.

⁶ Lindsay, Pl. xvii. figs. 37, 38.

⁷ MSS. Register House, Edin.

⁸ MSS. Reg. Ho., Edin.

These warnings against light foreign money are repeated more than once in the minutes of the Privy Council.

The effect of these proclamations was to make people refuse to take any sous or caroli at all, and in consequence a further order was made, making it highly penal for any one to refuse sous or caroli, or other such money, that will "nocht pas throw the ryng maid and demsit thairfor."⁹

1551. In December, 1551, it appears, from a minute of the Privy Council,¹⁰ that the King of France, having paid the wages of his soldiers in Scotland in sous, half-sous, caroli, and liards, the same are refused by the common people, and not taken in payment of the accounts due by the French soldiers, on which account it is ordained by the Lord Governor and Lords of Secret Council that the sous pass for sixpence, the half-sous threepence, the carolus fivepence, and the liard three halfpence, provided always that twelve of the sous weigh a just ounce.

1553. On the 11th of January, 1553, the Lord Bishop of Ross was hastily sent to France,¹¹ and a minute of the Privy Council provides for the coining of certain vessels of silver for his expenses, and orders the Lord Treasurer to deliver up the printing-irons of the "babeis" to the master coiner, who is required to mint the said bullion into "*babeis*," notwithstanding any other order to the contrary.

This notice is curious as showing that the dies were kept in the custody of the Treasurer, and not of the General of the Mint, and also because it casts a doubt on the present appropriation of the "bawbees" of Mary.

⁹ At Edin. on 7th Aug. MSS. Reg. Ho.

¹⁰ MSS. Reg. Ho. ¹¹ MSS. Record of Privy Council, Edin.

Cardonnel¹² figures a coin in his plate of billon pieces which Lindsay (p. 181) thinks was the "bawbee:" but Scottish Numismatists have grave doubts whether any such piece now exists, and also question its identity with the "bawbee" or "baby." I think the above notice shows that it was not the coin known as the "baby" at the time.¹³

A similar order in favour of William, Commendator of Culross, appears in the record a few days afterwards.

Unfortunately, the Record of the Privy Council, preserved in the Register House at Edinburgh, is blank from 1553 to 1559, so that very much of the documentary history of the coinage of that period is not preserved.

1554. In February, 1554, an act of the Secret Council is given by Mr. Lindsay¹⁴ as having passed at Linlithgow, ordering the striking of a new base coinage to supply the want of small money, much required throughout the country. This was to be "ane pece of ane penny fyne, threttyne of thame weigand ane once, haiffand the Lyonn Rampand Crownit on that ane syde with the words off vicit veritas prentit thair uponn. And upon that other syde the Letter of M crownit with this circumscription, Maria d. g. Scotoru. Regina, prentit in lyke manner, and to haiff cours throw all the Liegis off this Realme for thre halfpennyes."

It is evident from the weight of the coins preserved that "threttyne" must mean thirty to the ounce. It need hardly be remarked that the ounce here (and else-

¹² Pl. i. fig. 19.

¹³ Sir James Balfour says the "babees" were introduced in the time of James V., and then passed for three halfpence. Rudd.; p. 148.

¹⁴ Supp., p. 55.

where) mentioned is the ounce of the French troy weight, equal to $472\frac{1}{2}$ grains English modern troy, which was used in the Scottish mint from the time when the ounce of David's pound was disused. Much confusion has arisen from this fact not being attended to, and the acts of parliament regulating the number of coins to the ounce, read as if the ounce was the English troy one of 480 grains.¹⁵

About this period it appears from the Treasurer's account¹⁶ that a certain John Misserwie, described as "Anglus," was employed in the Mint. It is not stated in what capacity he acted, but as it is known that David Forres and John Atkinson, or Atchison, were the master coiners at this time, it is probable that this Misserwie was only employed in some subordinate capacity, unless he was the artist employed to sink the dies. Some probability is given to this supposition by the record of 1554 and 1555, containing some small sums paid to Thomas the smith for iron and steel, for the use in the Mint of "Misserwie, Inglisman," as he is somewhat abruptly styled in the original. In October, 1555, something appears to have gone wrong, for we find an entry of fifty shillings charged for the keep of "Misserwy, Inglisman," for twenty days before his committal to the Tolbooth of Edinburgh; and after this date his name does not occur in connection with the Mint at all.

1555. Mr. Lindsay gives, in the first Supplement to his View of the Scottish Coinage, an extract from the Register of

¹⁵ An example of the confusion arising from mistaking the weights used in the Scottish mint will be found in Mr. Lindsay, View of the Coinage, p. 57, where the denier and grain of the Scottish standard are mistaken for the English pennyweight and grain of the modern troy standard.

¹⁶ MSS. Reg. Ho., Edin.

Privy Council, taken from the Haddington MSS. in the Advocates' Library.¹⁷ This Order of Council provides for the coinage of pieces of gold which are to pass for three pounds, and are now known as the gold ryalls with the portrait and the date 1555, 1557, 1558. The silver coins are to be elevenpenny fine.

Bishop Nicolson¹⁸ says that the name "testoon" was not applied to the silver coins till the beginning of the next reign: but on the 23rd December, 1555, an entry in the Treasurer's accounts bears that a certain sum of money was delivered to the Queen by John Atchison, master coiner, "in new cunyt testouns," which shows that though this name is not found in the public acts, it was at any rate used in the public accounts, and must therefore have been well enough known at the time.

1558. In December, 1558, the inscription on the coin-
ing-irons was altered to the full title of Francis and Mary;
the coins struck in the earlier part of the year bearing
only Mary's name.¹⁹ The later coinage appears to have
been called "Lorraines," and consists of the well-known
testoons, with the monogram F. M. and the legend
"Fecit utraque unam." This name (Lorraine) may have
been given from the cross of Lorraine, which appears at
each side of the monogram. These coins are so called in
the Treasurer's accounts, where payment is entered "to
Monsieur de Faultre for the hale principale siluer ressaut
fra him and cunzeit in lorance:"²⁰ and again in the
month of February ten pounds are given "to the queenis

¹⁷ Lindsay, Supp., p. 56.

¹⁸ Scot. Hist. Library, p. 319 (1702).

¹⁹ Lesley's Hist., p. 268. This date is probably incorrect, as the month of November is stated to be the time in the Treasurer's accounts.

²⁰ MSS. Reg. Ho., Edinburgh.

grace in loranis to play at the cartis withe Erle of Huntlie and zounge Lethington."

In the following month (January) of this year the "Quenis Grace Dowerar of the Realme of Scotland and Regent of the samyn" orders the coinage of the rare King and Queenis Ducat.²¹ Minute and particular directions as to weight, type, value, and legend are laid down in the record. Both Cardonnel (p. 31) and Lindsay (p. 144) consider this piece to be a medal; though Mr. Lindsay altered his opinion after the discovery of this record. The coinage cannot have been an extensive one, as the whole coins are excessively rare, and the half is not, so far as I can at present learn, known to exist in any collection.

In March of this year there is a record of the coinage of the base silver pices with the legend "*Jam non sunt duo sed una caro.*"²² These were to be sixpenny fine only, and were ordered to pass for twelvecence. The type and legend are minutely particularised in the record.

1559. On the 13th day of July, 1559, the Prior of St. Andrews, and the Earl of Glencairn, with the congregation, passed to the Abbey of Holyrood House, and there "tuke and intromittit with the queenis irinis of the Cunzehous and brocht the samyn up to Edinburgh to his awin ludging quhairat the queenis grace regent was very discontentit."²³

But, ten days later, in the articles agreed on between the Queen's party and the Protestants, it is stipulated as one of the conditions that the latter shall give up the coining-irons to any one appointed by the Queen Regent to

²¹ Lindsay, First Supp., p. 56.

²² Lindsay, First Supp., p. 57.

²³ Diurnal of Occurrents (Mait. Club), p. 53.

receive them.²⁴ It is not stated that the Protestant party went the length of using the irons to issue any coinage with.

Knox, in his History of the Reformation, says that this interference with the Royal prerogative was done by the congregation, "because that daillie there war such numbers of lions, alias called hardheids, prented, that the baseness thereof maid all things exciding dear."²⁵

The coinage of lions, however, was still continued, for, in 1560, a precept of the Queen orders a stone weight of silver to be minted into "lyonis," though no particulars are given as to the amount of alloy to be used.²⁶

1562. In February, 1562, a mint was erected in the Castle of Edinburgh. Formerly it had been in the Abbey of Holyrood; but an entry in the Treasurer's accounts, under this year, authorises the payment of four hundred and sixty pounds, paid to William McDougall, "for expensis maid be him upon the bigging of the cunzehous within the Castell of Edinburgh and beting of the cunzehous within the palice of Halierudhous."

Two acts of parliament were passed in this year relating to the coinage.²⁷ One provides that no one shall carry gold or silver out of the country, under the pain of forfeiture of their goods, which act is to have effect for the next five years. The other statute forbids the import of false, or light, or base money, under the former penalties. Considerable quantities of bad money were apparently in circulation at that time. It was chiefly imported from abroad (France or Holland), but a forger of Scottish

²⁴ State Papers (Scot.) Eliz., vol. i. No. 69; Lesly, Hist. (Ban. Club), p. 277.

²⁵ Pinkerton, Essay on Medals, vol. ii. p. 138 (note).

²⁶ MSS. Reg. Ho., Edin.

²⁷ Acts, vol. ii. p. 538.

money was captured in England, and there is little doubt but that no small amount of the base money was manufactured there.²⁸

1564. An act of Secret Council preserved among the Harleian MSS. forbids gold and silver to be taken from the mines in the country, except to the Mint, and fixes the price to be given for it at £10 the ounce for the gold, and 23s. the ounce for the silver.

In the Treasurer's accounts for February, 1564,²⁹ we obtain a curious and interesting note of the salaries payable to the officials in the Scottish Mint upwards of three centuries ago.

"Item, to Daniel Forrest, generale of the Cunzehous, for his ordinar be the space of this moneth, xij/ xs.

Item, to Andro Hendersone, wardane of the said Cunzehous, for his ordinar be the said space, iiijl iijs iiijd.

Item, to Maister John Balfour, comptrollar wardane, for his ordinar be the said space, iijl vjs viijd.

Item, to James Gray, sincher of the Irinis, for his ordinar be the said space, vl.

Item, to James Mossman, assayer, for his ordinar be the said space, iijl vjs viiid."

These payments are repeated for several months, with sometimes the addition of £3 6s. 8d. to James Gray, for "tempering of the irnis ilk moneth."

1565. The year 1565 is remarkable for the first introduction into the Scottish currency of the large silver pieces known as "ryals." These were to pass for thirty shillings, and were to weigh one ounce troy (French standard). The act of the Privy Council authorising the issue of these pieces is given by Cardonnel in his preface.³⁰

²⁸ Col. State Papers, vol. i. p. 194.

²⁹ MSS. Reg. Ho., Edin.

³⁰ P. 18; Appendix, p. 1. Some doubts have been thrown upon these extracts, found in Keith's Appendix. This one is found, however, in the Reg. Sec. Con. Acta, vol. 1563—7, p. 151.

A much rarer type of the same kind was minted earlier in the year. This has the King and Queen face to face on the obverse, and bears Henry's name before Mary's. It has generally been supposed to have been either a medal or a pattern piece;³¹ but in a letter from Thomas Randolphe, the English ambassador, to Sir William Cecil, dated in December of this year,³² he states that "ther were lately certayne pieces of monie coyned wth both their faces 'Hen. and Maria;' these are called in and other framed, as here I sende y^r. H.; one wayinge v testons in sū and and current for vj:"—which shows that these were really in circulation, though evidently to a very small extent.

About this period a great quantity of false and light money was imported into the kingdom, and strict measures were in consequence taken by the Privy Council in the matter.

1566. In June, 1566, it is recorded in the minutes that, as certain persons have been apprehended within the burgh of Aberdeen, who have acknowledged that they brought false money from Flanders into the country, two commissioners, Robert Crichton of Elyoke, and James Millar, Depute Justice Clerk, are appointed to go to Aberdeen, and to take all possible means to discover the acts of the case. In the beginning of the following year, Andrew Murray, burgess of Perth, and Patrick Ramsay, burgess of Dundee, were executed for importing false money, called hardheads, into the kingdom; and an entry in the Treasurer's accounts,³⁴ under the date of May of this year, records the sum of xxiiij*l*. paid to "ane boy passand

³¹ Cardonnel, p. 99; Lindsay, p. 106.

³² State Papers (Scot.) Eliz., vol. ii., No. 103.

³³ MS. Reg. Sec. Con. Acta.

³⁴ Comp. Thes. MS. Reg. Ho.

of Edinburgh with the heidis, armis, and legges of Patrick Ramsay and Andro Murray justefit to the deith for in-bringing of fals hardheidis within this realme, to the townis of Dundee and Perth and otheris townis appointit."

This was immediately followed by an Act of the Privy Council, on the 19th of May,³⁵ forbidding the inhabitants of the Marches to take the light and false money, said to be fabricated in large quantities in Newcastle and Berwick, under heavy penalties.

On the 15th and 16th of July, the last coins of this unfortunate princess were struck. On those days "the Lords causit streik the Queenis work in xx shilling, xxx shilling, and x shilling pieces, which extended to 8 stone wecght." Towards the close of the month King James was proclaimed, and his first coinage was minted in August, immediately after his accession.

R. W. COCHRAN-PATRICK.

³⁵ MS. Reg. Sec. Con. Reg. Ho., Edin.

X.

ON THE COINS OF THE MUWAHHIDS IN THE BRITISH MUSEUM.

It is seldom, even in the field of Oriental Numismatics, that one finds a series of coins so untouched as those of the Muwahhid Khalifehs of Marocco, the Almohades of what may be called the Spanish Crusades.

Fraehn, who has generally published all one's discoveries, is in this case completely thrown into the background by Delgado (in Gaillard's *Mon. Esp.* Garcia de la Torre Collection) and Castiglioni (*Mon. Cuf. dell' I. R. Mus. di Milano*): but Delgado unfortunately limits himself to the bare registration of inscriptions; and Castiglioni, on the other hand, admits a superfluous amount of historical comment. Adler's *Collectio Nova* contains a very good account of four coins of the dynasty.

The following is a list of coins now published by me which have been published before:—

Dinārs.

'Abd-El-Mu-min, no. 1. (Delgado.)

Yūsuf I., no. 3. (Fraehn, *Rec.*; Castiglioni, incorrectly; and Delgado.)

El-Murtaḍā, no. 1. (Delgado.)

Some of the Dirhems.

The rest are, to my knowledge, inedited.

[In weighing I have used the French system; and, in measuring, English inches and tenths of inches.]

HISTORICAL SKETCH OF THE MUWAHHIDS.

The name *Muwaḥḥid*¹ signifies *One who says that God is One, a Unitarian*. Why El-Mahdī gave the name *El-Muwaḥḥidūn* (vulg. *El-Muwaḥḥidīn*) to his followers has, I believe, never been discussed. And yet it is surely a strange anomaly that a Mohammadan sect should take the name of Unitarians, when it is the fundamental doctrine of El-Islām that there is one God without associate. I think, however, that the name may easily be explained by a reference to the tenets of the sect to which El-Mahdī belonged: this was the Ash'ariyeh, with the opinions of which he was thoroughly imbued.² He was consequently a vigorous supporter of the allegorical method of interpreting the Kur-ān.³ We find him constantly attacking the over-orthodox Sunnīs⁴ of El-Maghrib⁵ on the subject of their anthropomorphic interpretations. In their opposition to anthropomorphism the Ash'aris agreed with the Moḥtezilis, and in the section on the latter in Esh-Schahrastāni's *Kitāb el-Milel wa-n-Noḥal* (trans. by Dr. Th. Haarbrücker) we find this sentence:⁶ 'Sie erklären die allegorische Deutung der Korānverse, in welchen solche Vergleichenungen' [als Richtung, Ort, Gestalt, Körper, u. s. w.] 'vorkommen, für nothwendig, und nennen diese Art und Weise des Verfahrens das *Einheitsbekenntniss*.' In this word *Einheits-*

¹ مَوْحِد is the act. participial noun of وَحَدَ, 2nd conj. of وَجَدَ.

² Ibn-Khaldūn, *Histoire des Berbères*, tr. by De Slane, vol. ii. p. 164.

³ Cf. Esh-Schahrastāni, *Religionspartheien und Philosophen-Schulen* (*Kitāb el-Milel wa-n-Noḥal*), trans. by Dr. Th. Haarbrücker, (2 vols. Halle, 1850-1,) vol. i. pp. 104, 109, etc.; Sale, *Korān*, Prel. Disc. p. 127, etc.

⁴ Esh-Schahrastāni, vol. i. p. 96.

⁵ Ibn Khaldūn, vol. ii. p. 164.

⁶ Esh-Schahrastāni, vol. i. p. 43.

bekanntniss (in the original Arabic⁷ التَّوْحِيد *Et-tawḥīd*) we have the explanation of the name *El-Muwaḥḥidūn*. *El-Mahdī*, and the rest of the *Ash'arīs*, as well as the *Moṭezilīs*, considered anthropomorphism to be inconsistent with the belief in the Unity of God; and therefore the *Maghrabī* reformers took the name of Unitarians, to distinguish themselves from the old school of *El-Maghrib*, whom the former regarded as quasi-polytheists.⁸

Abū-'Abd-Allāh Moḥammad Ibn-'Abd-Allāh-Tūmart, the Imām of the *Muwaḥḥids*, was born in the latter half of the fifth century of the *Hijreh*. He belonged to the *Hergħa* tribe, a branch of the *Masmūda*, and, like all Muslim reformers of eminence, was a descendant of 'Alī, the son-in-law of the Prophet. Stimulated by an augury, variously recorded, *Moḥammad Ibn-Tūmart*, after travelling in Spain and Egypt, and visiting *Mekkeh* and *Baghdād*, determined to conquer *El-Maghrib*, then under the rule of the dynasty of *Yūsuf Ibn-Tāshifīn*, and to secure the sovereignty for the *Masmūda*. He began by writing several religious treatises, such as the *Tūwḥīd*. He next instituted systematic polemico-theological discussions with the *Maghrabī* Doctors, generally coming out victorious. During these religious campaigns he met with 'Abd-*El-Mu-min*, the future founder of the *Muwaḥḥid* dynasty. After more wandering, and after presenting himself at *Marrākush*, at the court of 'Alī Ibn-Yūsuf the *Murābiṭ* sovereign, *Ibn-Tūmart* summoned together the tribe of the *Masmūda*; and when the chiefs had sworn the oath of fealty to him, he took the name of *El-Mahdī*,⁹ and gave

⁷ *Ed. Cureton*, pt. i. p. 30, l. 16.

⁸ After I had written this I found that *Ibn-Khaldūn* (vol. ii. p. 173) had come to the same conclusion.

⁹ *El-Mahdī* means *The Directed* (pass. participial n. of هَدَى). The *Mohammadan* idea of the *Mahdī* has an exact parallel in the Jewish idea of the Messiah. The *Mahdī* was expected to make

that of *El-Muwahhidūn* to his adherents. In 522 (1128) El-Mahdī died, leaving 'Abd-El-Mu-min chief of the Muwahhids.

EL-MUWAHHIDĪN.¹⁰

1128	522	Death of El-Mahdī.
1130	524	'Abd-El-Mu-min succeeds.
1163	558	Abū-Yaḥqūb Yūsuf Ibn-'Abd-El-Mu-min.
1184	580	Abū-Yūsuf Yaḥqūb El-Manṣūr Ibn-Yūsuf.
1199	595	Moḥammad En-Nāṣir Ibn-El-Manṣūr.
1214	611	Abū-Yaḥqūb Yūsuf El-Mustanṣir Ibn-En-Nāṣir.
1224	620	'Abd-El-Wāḥid El-Makhlūa Ibn-'Abd-El-Mu-min.
"	621	Abū-Moḥammad 'Abd-Allāh El-'Adil Ibn-El-Manṣūr.
1227	624	Yahyā Ibn-En-Nāṣir.
1229	626	Abu-l-'Olā Idrīs El-Ma-mūn Ibn-El-Manṣūr.
1232	630	'Abd-El-Wāḥid Er-Rashīd Ibn-El-Ma-mūn.
1242	640	Abū-l-Ḥasan 'Alī Es-Sa'id El-Moatadīd Ibn-El-Ma-mūn.
1248	646	Abū-Hafṣ 'Omar El-Murtadā Ibn-Abī-Ibrāhīm-Ishāḳ Ibn-Yūsuf Ibn-'Abd-El-Mu-min.
1266	665	Abu-l-'Olā Abū-Debbūs El-Wāthīḳ Ibn-Abi-'Abd-Allāh-Moḥammad Ibn-Abī-Hafṣ Ibn-'Abd-El-Mu-min.
1269	667	Conquered by the Benī-Merīn.

Fearing dissensions, 'Abd-El-Mu-min and the other chief disciples concealed the death of the Mahdī for about three years under the pretence of illness, and in the meanwhile directed all their efforts towards strengthening and consolidating the sect. In 524 they announced the death of their master, and also the designation by him of 'Abd-El-Mu-min as successor in the chief authority.

The new leader occupied himself with various successful expeditions until 534 (1139-40), when he began his seven-years-campaign of conquest. His troops were daily augmented by deserters from the Murābiṭs, and there seemed every prospect of a speedy conquest of El-Maghrib. In 539 (1144-5) he annihilated the army of the Murābiṭ

the religion of El-Islām triumph over all others, and to establish justice throughout the world.

¹⁰ This table is taken from De Slane's *Intr. to his Trans. of Ibn-Khaldūn*, with very few alterations. Except in a discussion on the meaning of the word, I have thought it advisable to use the relative case *Muwahhidīn*, which in Modern Arabic is employed in the stead of the subjective case *Muwahhidūn*; the use of the latter form being generally deprecated as pedantic.

Tāshifin Ibn-'Alī, and captured Wahrān (Oran) and Tilimsān. In 540 Fās was taken, and Sebteh (Ceuta) sent a deputation of submission. After seizing Aghmāt and Selā (Salee), 'Abd-El-Mu-min laid siege to Marrākush (Marocco), which, after a seven-months-siege (541), fell, and with it the dynasty of the Murābiṭs in the person of Ishāk Ibn-'Alī Ibn-Yūsuf Ibn-Tāshifin. By the capture in 543 of Sijilmāseh and Miḵnāseh (Mequinez) the Muwaḥḥids became masters of the whole of El-Maghrib (Marocco and part of Algiers).

In the midst of his African conquests 'Abd-El-Mu-min had not forgotten Spain. An expedition was sent there in 540 (1145-6); and Xeres, Mertola, Niebla, Siloes, Beja, and Badajoz, were speedily added to the dominions of the Unitarians; Seville was taken in 541; and Cordova joined the rest in the following year.

Marocco and Spain being subdued, 'Abd-El-Mu-min turned his thoughts towards Afrikiyeh (the country lying between Egypt and Bejāyeh in Algiers); and he determined to attack it. In 547 he took Bejāyeh and Kusan-tīniyeh (Constantina); and, soon after, his son 'Abd-Allāh defeated the Arabs of Afrikiyeh and received their submission, about half the province being thus acquired. Disturbances in other parts of his dominions prevented 'Abd-El-Mu-min from following up this success at once; but in 553 (1158) he returned to the attack, and succeeded in conquering the more eastern parts of Afrikiyeh, then under the rule of Roger II. of Sicily: El-Mahdiyyeh, Tūnis, and Ṭarābulus (Tripoli), now formed part of the empire, which stretched from Egypt to the Atlantic and from Marocco to Cordova. 'Abd-El-Mu-min's attention was next directed again towards Spain, where his son Yūsuf was hard pressed by Alfonso VIII. of Castile. After

relieving his son he returned to Africa, and began to make preparations for a renewal of the 'Holy War.' It was when setting out in 558 (1163) for this last expedition that the great leader of the Muwahhids was visited by 'the terminator of delights and the separator of companions.'

I have sketched the conquest of the various countries that united to form the extensive empire of the Muwahhids; and I shall now mention a few of the leading events that happened in the reigns of 'Abd-El-Mu-min's successors.

The main subject of interest is the Holy War, or the continual and absorbing struggle between the Christian Kings of Castile and of Aragon and the Mohammadan Khalifehs of Marrākush for the possession of Andalusia,—a struggle which, long after the subversion of this dynasty, ended in the complete overthrow of the Muslim power in Spain. We have also to notice frequent insurrections in Africa, especially the conquest of Afrikiyeh attempted, and almost attained, by Ibn-Ghanīyeh. With respect to the orthodoxy of the Khalifehs, we find a remarkable exception in the case of El-Ma-mūn, who suppressed the name of El-Mahdī in the Khuṭbeh and Sikkeh, (or prayer and coinage,) and restored the dirhems to their original circular shape: his tolerance extended to allowing the Christians to build a church in Marrākush, and even to ring the bells. Er-Rashīd, the son and successor of this liberal Khalifeh, seems to have followed in his father's steps; for Adler (*Coll. Nov.* xc. A.) publishes a silver coin with the name Er-Rashīd substituted for El-Mahdī. Probably Es-Sa'īd followed the example of his father and brother. But the coins prove that El-Murtaḍā and El-Wāthik restored the repudiated name of the Imām of the dynasty to the gold coins; for we cannot but conclude that El-Ma-mūn omitted the name of El-Mahdī from the gold

as well as the silver coins, although Ibn-El-Kātib (ap. Casiri ap. Adler) mentions the omission in the dirhems only.

The fall of the Muwahhids was clearly foreshadowed by two significant facts, the multitude of pretenders to the throne, and the growing importance of the tribe of the Benī-Merīn. These mountaineers had long been slowly advancing and gradually increasing in power, until finally, having pursued and killed El-Wāthik, they entered Marrākush in 668 (1269-70).

ON THE COINAGE OF THE MUWAHHIDS.

The coinage of this dynasty, as represented in the British Museum, exhibits many peculiarities.

Gold. Form *circular*. The area is always square, defined by single, double, or triple, lines. The coin is struck of such a size that the circumference almost touches the angles of the inscribed square. Four segments of a circle are thus formed between the square and the circumscribed circle, and in these segments various words which compose the marginal inscription are distributed. In transcribing the coins I have always indicated by spaces the division of the marginal inscription into four parts. The field abounds in points, some diacritical, and some not. When the points are diacritical, intentionally or accidentally, I have noted them separately. Instances will be observed of diacritical points inverted, put above instead of below a letter, or contrariwise. There are usually three dots in each of the four segments, one at each end and one in the middle, independent of the diacritical points. The appropriation of a particular area or margin to a particular part of the inscriptions is also noteworthy. The area of the obverse is always reserved for religious sentences, including the profession of faith (لَا إِلَهَ إِلَّا اللَّهُ مُحَمَّدٌ رَسُولُ اللَّهِ), and generally a reference to the Mahdī, and the special motto of the

Muwahhids (الحمد لله وحده), adopted for official purposes by Yūsuf I. in 561. The area of the reverse is always appropriated to the name and titles of 'Abd-El-Mu-min, with sometimes a clause on the Mahdī. The margin of the reverse is occupied by the name of the reigning Khalīfeh, and that of the obverse by the name of his predecessor, (or a sentence from the K̄ur-ān,) save in the cases of El-Murtaḍā and El-Wāthik, who reversed this by putting their own names on the obverse margin and that of Yūsuf on the reverse margin.

Silver. Form *square*. Inscriptions in area only. Field covered with points and fleurons. Mint-place sometimes below the ordinary inscription of the obverse.

Copper. None known.

EL-MUWAHHIDĪN.

A. DĪNĀRS.

'ABD-EL-MU-MIN.

1

1. (Pl. VI. 1.)

I. A.

لا إله إلا

الله محمد

رسول الله

بسم الله الرحمن الرحيم صلى الله على محمد وآله الطيبين
الطاهرين

II. A.

المهدي إمام

الأمة القائم

بأمر الله

M. أبو محمد عبد المؤمن بن علي أمير المؤمنين
الحمد لله رب العالمين

D. '75 W. 2-3

Diacritical points.

I. M. علي.

II. A. الامة—الفاسم.

M. الموسى بن ; it is doubtful to which بن the point belongs ;

المومنين—العالمين

2.

2

Similar to (1).

Diacritical points.

D. '8 W. 2'3

I. M. علي—طمين.

II. M. الموسى بن المومنين.

The only difficulty that meets us on this coin is the name *El-Kāim bi-amri-llāh*. The supposition, maintained by some writers, that this name must be referred to the 'Abbāsī Khalifeh *El-Kāim* is scarcely countenanced by the facts that the Muwahhids and the Abbāsīs were the representatives of hostile sects, the former being Shi'īs and the latter Sunnīs ; and also that *El-Kāim* had been dead half-a-century when 'Abd-El-Mu-min was circulating his coinage. I think there is not the least doubt that this name was a title of 'Abd-El-Mu-min : for, except on his own coins, it always, throughout the series of *dinārs* of this dynasty, precedes his name ; and even on his own coins the case is the same, if we suppose the marginal inscription to be a continuation of that in the area.

The conjectural reading of Castiglioni (*Monete Cufiche dell' I. R. Museo di Milano*, CCXLIV), المهدي امام (بن) الائمة, *El-Mahdi Imam (figlio) di Imami*,¹¹ is more ingenious than

¹¹ Sig. Castiglioni adds the following remark as a vindication of his singular reading.—“*Mahdi* è insignito del titolo di figlio

sound, for no coin that I have seen will bear any other reading than *إمام المهدي الأمة*, which gives the thoroughly intelligible meaning of *El-Mahdī is the leader of the people-of-the-religion*¹² (the religion of Islām).

The reading *الطيبين* on I. M. is, I believe, entirely original. Soret reads, but doubtfully, *الكبير*; and Delgado *الطاهر*. I cannot, of course, state positively that *الطيبين* should be the reading on the coins to which these Numismatists refer: but I can affirm positively that *الطيبين* is most distinctly visible on the coins in the British Museum; and in confirmation of my reading I may state that this epithet is commonly applied to the Prophet's kinsfolk.

ABŪ-YAAKŪB YŪSUF I.

3

1.

I. A.

بسم الله الرحمن الرحيم
لا إله إلا الله
محمد رسول الله
المهدي إمام الأمة

M. أمير المؤمنين . أبو يعقوب بن الخلفاء الراشدين

di *Imami*, ed in fatti questo impostore si spacciava per discendente da *Aly* e da *Hassan* di lui figlio, primo e secondo *Imam* degli *Sciiti*."

¹² 'The people of a [particular] religion: (Akh, S:) a people to whom an apostle is sent, (M, K.) unbelievers and believers; such being called his *أمة*: (M:) any people called after a prophet are said to be his *أمة*: (Lith, T:) the followers of the prophet: Lane's *Lexicon*, voce *أمة*.'

- II. A. القائم بأمر الله
الخليفة أبو محمد
عبد المؤمن بن علي
أمير المؤمنين

M. أمير المؤمنين أبو يعقوب يوسف بن أمير المؤمنين

Diacritical points.

D. '85 W. 2'33

I. M. الخلفا الراشدن.

II. A. القائم—عبد—علي—المؤمنين.

II. M. يوسف.

2.

4

Similar to (1).

Diacritical points.

D. '8 W. 2'33

I. M. الخلفا.

II. M. القائم—أمير المؤمنين.

3. (Pl. VI. 2.)

5

I. A. Similar to (1).

M. وإلهم إله واحد لا إله إلا هو الرحمن الرحيم

(Kur. ii. 158.)

II. Similar to (1).

Diacritical points, &c.

D. '82 W. 2'3

I. A. محمد.

II. A. القائم—عبد المؤمن بن—علي.

ABŪ-YŪSUF YAĀKŪB EL-MANSŪR.

6

1.

I. A.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
 وَالْحَمْدُ لِلَّهِ وَحْدَهُ
 لَا إِلَهَ إِلَّا اللَّهُ
 مُحَمَّدٌ رَسُولُ اللَّهِ
 الْمَهْدِيُّ إِمَامُ الْأُمَّةِ

M.

وَالْهَيْكَلُ إِلَهُ وَاحِدٌ لَا إِلَهَ إِلَّا هُوَ الرَّحْمَنُ الرَّحِيمُ
 وَمَا يَكُنْ مِنْ نِعْمَةٍ فَمِنَ اللَّهِ وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ

II. A.

الْقَائِمُ بِأَمْرِ اللَّهِ الْخَلِيفَةُ
 أَبُو مُحَمَّدٍ عَبْدِ الْمُؤْمِنِ بْنِ
 عَلِيِّ أَمِيرِ الْمُؤْمِنِينَ
 أَمِيرِ الْمُؤْمِنِينَ أَبُو يَعْقُوبَ
 يَوْسُفَ بْنِ أَمِيرِ الْمُؤْمِنِينَ

M. أَمِيرِ الْمُؤْمِنِينَ أَبُو يَوْسُفَ يَعْقُوبَ بْنِ أَمِيرِ الْمُؤْمِنِينَ
 بْنِ أَمِيرِ الْمُؤْمِنِينَ

Diacritical points.

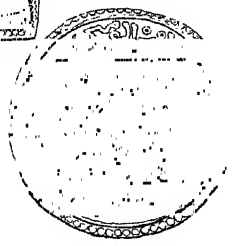
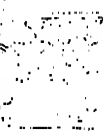
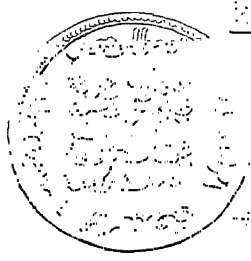
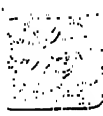
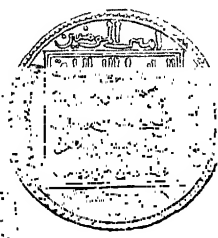
D. 1'1 W. 4'58

I. A. بِسْمِ

M. فَمِنْ—تَوْفِيقِي

II. A. عَبْد—بَن—أَلِ الْمُؤْمِنِينَ—يَعْقُوبَ—يَوْسُفَ

M. يَوْسُفَ



J. J. Lass

2.

7

Similar; var. بن commences l. 3 of II. A. instead of ending l. 2.

Diacritical points.

D. 1'1 W. 4'46

II. A. المومنين^a — المومسين^b

M. المومنين — يعقوب — المومنين — المومنين

3. (Pl. VI. 3).

8

Similar to (2).

Diacritical points.

D. 1'1 W. 4'63

I. M. رعمة

II. A. الحلبة — المومن — المومسين — امير — يعقوب — المومسين

M. امير المومنين ابو يوسف يعقوب — المومنين — المومنين

4.

9

Similar to (2).

Diacritical points, &c.

I. A. محمد

II. A. القام — عبد المومن — علي امير المومسين

M. امير — يوسف

D. '8 W. 2'3

5.

10

Similar to (2).

Diacritical points, &c.

I. A. محمد

II. A. القام — الخلبة — عبد المومن بن علي امير المومسين

M. يعقوب يوسف بن

D. '85 W. 2'2

The marginal inscription on the first side is very remarkable : I am not aware that it occurs on any other coin in this form, though the first half is well known on coins of this dynasty and others of North Africa and Spain.

وَالْهَيْكَمُ إِلَهُ وَاحِدٌ لَا إِلَهَ إِلَّا هُوَ الرَّحْمَنُ الرَّحِيمُ
وَمَا يَكُنْ مِنْ نِعْمَةٍ فَمِنَ اللَّهِ وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ

And your god is one god; there is no god but He, the Compassionate, the Merciful:
And what there is of benefit is from God; and my direction is not but by God.

ABŪ-YAẖKŪB YŪSUF II. EL-MUSTAṢṢIR.

11

1.

I. A.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
وَالْحَمْدُ لِلَّهِ وَحْدَهُ
لَا إِلَهَ إِلَّا اللَّهُ
مُحَمَّدٌ رَسُولُ اللَّهِ
الْمَهْدِيُّ إِمَامُ الْأَمَّةِ

أَمِيرُ الْمُؤْمِنِينَ أَبُو عَبْدِ اللَّهِ مُحَمَّدٌ بْنُ الْخَلِيفَانِ الرَّاشِدِينَ M.

II. A.

الْمَهْدِيُّ إِمَامُ الْأَمَّةِ
الْقَائِمُ بِأَمْرِ اللَّهِ
الْخَلِيفَةُ الْإِمَامُ
أَبُو مُحَمَّدٍ عَبْدِ الْمُؤْمِنِ
بْنِ عَلِيٍّ أَمِيرُ الْمُؤْمِنِينَ

أَمِيرُ الْمُؤْمِنِينَ أَبُو يَعْقُوبَ يَوْسُفَ بْنَ الْخَلِيفَةِ M.

D. 1'25 W. 4'63

Diacritical points.

I. A. الرحيم—رسول

M. امير المؤمنين—عبد

II. A. الفاسم—ابن—امير المؤمنين

M. امير المؤمنين—نوبيع

2. (Pl. VI. 4.)

12

I. A. Similar to (1).

M. أمير المؤمنين أبو عبد الله محمد ابن الخليفة الراشدين

II. A. Similar to (1).

M. أمير المؤمنين أبو يعقوب يوسف ابن المنصور ابن الخليفة

Diacritical points.

D. 1'25 W. 4'63

None; but a five-rayed star over الامه

There can be no question about the attribution of the second of these two coins, on account of the occurrence of Yūsuf Ibn-El-Manṣūr (apparently meaning grandson of El-Manṣūr) on the margin of the reverse. But the former of the two at first sight might equally well be a coin of En-Nāṣir. The following argument, however, considered in connection with the resemblance between the two coins induces me to decide in favour of Yūsuf II. If the coin were struck by Abū-'Abd-Allāh Moḥammad En-Nāṣir, I. M. would refer to him and II. M. to his grandfather Yūsuf I.: this would create an anomaly; for both the preceding and the following Khalifeh put his own name on II. M. This anomaly is done away with if we suppose the coin to have been struck by Yūsuf II., II. M. thus referring to himself and I. M. to his father En-Nāṣir.

The fact, however, that Yūsuf is called 'son' of the Khalifeh seems to point in the other direction; for الخليفة is the title of 'Abd El-Mu-min alone.

ABŪ-HAFS 'OMAR EL-MURTADĀ EL-MU-MIN BILLĀH.

13

1. (Pl. VI. 5.)

I. A. بسم الله الرحمن الرحيم
 صلى الله على محمد وآله
 والحمد لله وحده
 لا إله إلا الله
 محمد رسول الله
 مدينة سبئية

M. أمير المؤمنين المؤمن بالله المرتضى أبو حفص
 ابن الأمير الظاهر أبي إبراهيم بن الخليفين

II. A. المهدي إمام الأمة
 القائم بأمر الله
 الخليفة الإمام
 أبو محمد عبد المؤمن
 ابن علي أمير المؤمنين

M. أمير المؤمنين أبو يعقوب يوسف ابن الخليفة

Diacritical points.

D. 1'15 W. 4'63

I. M. — أمير — المؤمن — المرتضى — ابن الأمير الظاهر — أبو هم —
 الخليفين

II. A. القائم — عبد المؤمن — المؤمن —

M. أمير — يوسف — الخليفة

2.

14

Similar to (1); var. I. A. مدينة under محمد, and سبتة under الله.

Diacritical points.

D. 1'15 W. 4'63

I. M. المومنين المومنين

II. A. المومنين

M. امير-يعقوب-يوسف-ابن الخليفة

3.

15

Similar to (1); var. I. A. مدينة under محمد, and سبتة under الله.

Diacritical points.

D. 1'15 W. 4'63

I. M. المريضى

II. M. يوسف

4.

16

Similar to (1); var. no mint-place.

D. 1'15 W. 1'63

Diacritical points.

I. M. المريضى

II. A. الفايم-الخليفة-عبد المومنين ابن-امير المومنين

M. امير المومنين ابو يعقوب يوسف ابن الخليفة

5.

17

Similar to (1); var. no mint-place.

Diacritical points.

D. 1'2 W. 4'63

I. A. بسم-الرحيم

M. المومنين المومنين-المرتضى-ابن-ابراهيم-الحليقيس

II. M. يعقوب يوسف

I am inclined to think that the Yūsuf whose name appears on II. M. is Yūsuf I., because El-Murtaḍā was his grandson; whereas Yūsuf II., though he preceded El-Murtaḍā, was of a lower generation than he.

ABU-L-'OLĀ EL-WĀTHIK BI-LLĀH.

18

1. (Pl. VI. 6.)

I. A.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
صَلَّى اللَّهُ عَلَى مُحَمَّدٍ وَآلِهِ
وَالْحَمْدُ لِلَّهِ وَحْدَهُ
لَا إِلَهَ إِلَّا اللَّهُ
مُحَمَّدٌ رَسُولُ اللَّهِ

M. أمير المؤمنين الواثق بالله أبو العلى ابن
سيد أبي عبد الله بن سيد أبي حفص بن الخليفة

II. A.

المهدي إمام الأمة
القائم بأمر الله
الخليفة الإمام
أبو محمد عبد المؤمن
ابن علي أمير المؤمنين

M. أمير المؤمنين أبو يعقوب يوسف ابن الخليفة

Diacritical points.

D. 1'2 W. 4'6

I. A. بسم

II. M. يعقوب—يوسف—الخليفة

Here again we find Yūsuf on II. M., and in this case the coin is not struck by a grandson. I conclude, therefore, that El-Wāthik, whose short reign was fully occupied with the all-important endeavour to keep on the throne, altered the obverse of his predecessor's coinage, but did not change the die for the reverse.

B. DIRHEMS.

- I. لا إله إلا الله
الأمر كله لله
لا قوة إلا بالله
- II. الله ربنا
محمد رسولنا
المهدي إمامنا

The inscriptions, on both sides, are enclosed by straight lines forming square; and the coin is cut to the same figure. No marginal inscriptions. Average weight, 1'45. Average length of side of square, '59.

Of this type of coin there are twenty-six specimens in the British Museum. Seven of these have legible mint-places; viz.:

Tilimsān	2 (Pl. VI. 7.)	19-20
Tūnis	2 (Pl. VI. 8.)	21-22
Bejāyeh	1	23
Sebteh	1	24
Fās	1	25

and four have illegible mint-places. The position of the mint-place is always at the bottom of I., either altogether

below the words **بَالَل** ; or separated, and placed part under 3 and part under **بَالَل** (see Pl. VI. 8).

- 30-44 The remaining specimens differ every one from every other by reason of the ever-varying positions and forms of certain dots and fleurons (Pl. VI. 9).

There can be no reasonable doubt that these square coins were issued by one or more of the Sovereigns of the Muwahhids. The following passage from Ibn Khaldūn¹³ is interesting in its bearing on the square form of the coins.

‘L’Imam, ayant quitté les Hintata, se dirigea vers Aîguîlin, dans le pays des Hergha, et s’arrêta au milieu de sa tribu. Il y arriva l’an 515 (1121-2). Ayant alors bâti un *rabta* pour s’y livrer à la dévotion, il attira auprès de lui une foule d’étudiants et de gens de différentes tribus, auxquels il enseigna son *Morchida* et son *Tauhid*, rédigés en langue berbère. Le nombre de ses partisans s’accrut tellement que Malek-Ibn-Woheib, président du corps des savants qui assistaient aux réunions de l’émir Ali-Ibn-Youçof, recommença ses dénonciations. Jouissant d’une certaine réputation comme augure et astrologue, il ne manqua pas d’indisposer son patron contre le Mehdi, et, comme les devins avaient prédit qu’un roi de race berbère devait nécessairement paraître en Maghreb et changer la forme de la monnaie aussitôt qu’il y aurait une conjonction des deux planètes supérieures, ce prince s’attendait déjà à quelques malheurs. “Protège l’empire contre cet aventurier, lui disait Ibn-Woheib; c’est assurément l’homme de la conjonction et du dirhem carré; celui dont il est question dans ces méchants vers en patois qui courent maintenant de bouche en bouche.

Mets-lui les fers aux pieds; ou bien, un jour,
Il te fera entendre un tambour!

¹³ *Histoire des Berbères*, vol. ii. p. 168.

J'ai la conviction que c'est lui qui est l'homme au dirhem carré.'''

I am completely at a loss to decide to what prince of the dynasty these square coins should be assigned. At first I inclined to the opinion that they were struck by El-Mahdī himself. But my attention was directed by Señ. Camarino to the fact that the mint-places whose names are found on the coins were not conquered by the Muwahhids till after the death of El-Mahdī. Señ. Camarino's opinion is that the coins were struck by the whole series of Muwahhid Khalifehs. I think this view highly probable, and the slight differences of these coins inter se by dots and fleurons favours it. Still, as all the mint-places found on the square Muwahhid dirhems in the British Museum Collection were conquered in the time of 'Abd El-Mu-min, it is quite possible that all of them were struck by him or in his time. The passage I have quoted from Ibn-Khaldūn would make one think that some of the dirhems were struck by 'Abd-El-Mu-min himself in order to fulfil the prediction; but on the other hand Adler (*Coll. Nov.* LXXXIX. A.) publishes a square dirhem with these inscriptions:

I. الحمد لله

رب

العامين

II. ابو محمد عبد

المومن بن علي

امير المؤمنين

If this coin was really issued by 'Abd-El-Mu-min (and the fact that the inscriptions, put together, are identical with M. II. of the dīnārs of this Khalifeh (see p. 154), puts this, in my opinion, beyond a doubt) it is difficult to conceive why he should have issued a different type of coin on which his name is not mentioned. Adler has also published (ibid. xc. a.) a *circular* dirhem of Er-Rasheed, tenth of the line; the circular form is explained by the orthodoxy of El-Ma-mūn (see p. 152).

There still remain, however, several important Khalī-fehs whose names we find on no dirhems. These dubious dirhems may have been struck by them.

I must now leave the square coins, with their origin as much in obscurity at the end of my remarks as at the beginning, except for these few negative results.

- (1) It is impossible that those of them that have mints should have been struck by El-Mahdī.
- (2) From the first fact, and also (as Adler remarks) from the early death of El-Mahdī, it is very unlikely that he struck even the unminted dirhems.
- (3) It is impossible that they should have been struck by El-Ma-mūn or Er-Rashīd.
- (4) 'Abd-El-Mu-min having struck dirhems with his own name on them, it is improbable that he struck others without his name.

STANLEY E. LANE POOLE.

BRITISH MUSEUM, March 20, 1873.

APPENDIX.

In looking over the coins of the Saffārīs in the British Museum, I found on one of them a new mint, which I subsequently discovered to be بُسْت *Bust*. I think this is worth publishing, and have therefore added it as an appendix to my paper on the Muwahhids, not thinking it necessary to make a separate article on so short a subject.

I. A. لا إِلَهَ إِلَّا
الله وحده
لا شريك له
الليث بن علي

M. 1. بسم الله ضرب هذا الدرهم بمدينة بستان سنة ثمان وتسعين
ومائتين

M. 2. لله الأمر من قبل ومن بعد ويومئذ يفرح المؤمنون بنصر الله

II. A. لله
محمد
رسول
الله
المقتدر بالله

M. 1. محمد رسول الله أرسله بالهدى ودين الحق ليظهره على
الدين كله ولو كره المشركون

Bust was a city between Sijistān, Ghazneh, and Herāt : it now exists, but in ruins.¹⁴ I believe this mint is as yet unknown, and my opinion is confirmed by that of Señ. Camarino, whose wide acquaintance with Oriental Numismatics gives it great weight.

El-Leyth Ibn-'Alī must have been a son of 'Alī the brother of Yaḡkūb and 'Omar the sons of Leyth : and the date exactly agrees with the hypothesis.¹⁵

STANLEY E. LANE POOLE.

BRITISH MUSEUM, *March* 26, 1873.

¹⁴ *Marāṣid El-Iṭṭilā'* ; and Barbier de Meynard, *Dict. de la Perse*.

¹⁵ See Price's *Retr. of Mah. Hist.* vol. ii. pp. 229-234.

NOTICE OF RECENT NUMISMATIC PUBLICATIONS.

In the *Revue de la Numismatique Belge*, 5me Série, Tome IV. 4me liv., are the following articles:—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*," Supplement (7th article), by M. le Lieut.-Colonel P. Mailliet.
2. "Notice of the Barneveld Find," by M. J. F. G. Meijer.
3. "Numismatic History of Brielle, 1572—1872," by M. A. Brichaut.
4. "Notes on the Numismatic History of the Seignior of Reckheim," by M. le Baron J. de Chestret de Haneffe.
5. "Contemporary Monetary History." Fragments (3rd art.), by M. A. Brichaut.

In the *Correspondance* is a letter from M. Cam. Picqué to M. Alex. Pinchart, on the medallist H. R. (1535—1547).

In the *Mélanges* is a paragraph concerning the Gaulish collection of M. de Sauley, which was lately offered to the British Museum for a sum of £8,000, upon which the French learned societies combined in petitioning the Minister of Instruction not to allow a collection of such immense national importance to pass from the country, the result being that the French government has resolved to purchase the whole collection.

In the *Nécrologie* is a notice of Nicholas Hauzeur.

In *Tome V.*, 1re livraison, are the following articles:—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*," Supplement (8th article), by M. de Lieut.-Colonel P. Mailliet.
2. "Imitations of Types proper to Lorraine and its neighbourhood," by M. J. Chautard.
3. "Inedited Coins and Jetons relating to the history of the seventeen ancient provinces of the *Pays Bas*," by M. le Comte Maurin Nahuys (3rd article).
4. "Rare Coins in the Marseilles Cabinet," by M. Laugier.
5. "*Jean d'Arendal* and the Coins of the Lords of Rheidt and Well," by M. Chestret de Haneffe.
6. "Notice of some Coins of Liège," by Dr. Dugniolle.

In the *Nécrologie* are notices of Messrs. C. P. Serrure and Jules Borgnet.

De la Signification des lettres OB sur les monnaies d'or Byzantines, par MM. Pinder et J. Friedlaender. Seconde édition, augmentée d'un Appendice par J. Friedlaender. Berlin. 1873.

It appears from the few prefatory remarks to this paper, that a learned Italian, whose name is not given, has recently published a *solidus*, from which it has been adduced that the explanation of the letters OB given by the late M. Pinder and by Dr. J. Friedlaender in 1851 has been totally upset. Dr. Friedlaender sent a reply to the *Numismatic Journal* of Vienna, showing that this *solidus* proved nothing against their explanation. In France the Italian memoir, but not Dr. Friedlaender's answer in the German language, has been read, and Dr. Friedlaender hears from Paris that his "explication est jugée en dernier ressort."

Hence the reason for the production of this second edition, which includes a notice of the remarks of M. Cohen on the same subject published in the sixth volume of "Les Médailles Impériales."

This is the old story,—the French will find the letters OB on the large medallions, on the copper, on what not, and therefore they assert that these letters cannot possibly be the numerals 72, and signify that "72 *solidi* went to the pound."

This is not the first reply that M. Cohen has received, nor the first time that MM. Pinder and Friedlaender's arguments have been laid before numismatic readers. Papers on this subject have been written by Mr. F. W. Madden, and published in the NUMISMATIC CHRONICLE. The first, entitled "On the Coins of Theodosius I. and II., with some remarks on the mint-marks 'Comob' and 'Conob,'" appeared in 1861; and the second, entitled "Remarks in reply to M. Cohen's observations on the explanations of the letters OB, TROB, &c., &c.," was printed in the following year.¹

The arguments now brought forward by Dr. Friedlaender are very similar to those employed by Mr. Madden, and until some conscientious Numismatist takes up the subject and carefully weighs what has been written, without quoting Père Hardouin or his antagonists, or alluding to the foolery of antiquaries, we are of opinion that the question as originally treated by MM. Pinder and Friedlaender, as further investigated and corrobora-

¹ It is necessary to state that Dr. Friedlaender was in total ignorance of the existence of these papers until April, 1873. Otherwise he would doubtless have quoted from them to show that in any case his views were supported in England.

rated by Mr. Madden, and now again admirably stated by Dr. Friedlaender, must be decided in favour of the interpretation given by these Numismatists. This second edition being in French will be accessible to most English readers, but, failing the knowledge of that language, a reference to the pages of the *CHRONICLE* of 1861 and 1862 will furnish a general idea of this important question.

Dr. Friedlaender may be congratulated on the successful manner with which he has worked out his theory.

Catalogue of Greek Coins in the British Museum.²

The first volume of this catalogue, projected several years ago, has just appeared, and contains all the specimens of the Greek and Oscan coinages of Italy which are preserved in the cabinets of the Museum. We welcome it as at once a useful addition to the works of Carelli, Millingen, and Sambon, and an inventory of the national property. In the arrangement, the usual geographical order has been followed in the placing of mints; but in the arrangement of the series of coins struck at the same city, an attempt has been made to observe something like a chronological order. In the main we approve of the adoption of a chronological arrangement. Certainly it is the only scientific one, and in the case of cities like Syracuse or Himera, where the series of coins can be so arranged as to illustrate the vicissitudes of history, nothing could possibly be desired more complete. But unfortunately, in the present state of archæology, we are unable to tell with accuracy the date of a coin from its mere style, unless there be something in its types or legends to point to a historical event. Thus the greater part of the coinages of cities like Tarentum, Neapolis, and Metapontum can only be generally classed to a particular century, and the sub-arrangement of the different pieces belonging to the same period must needs be a matter of difficulty and uncertainty. The result of this is that it is quite impossible to avoid the appearance of confusion and want of method in the catalogue of the coins of many Italian cities. The best, perhaps the only remedy, is in the addition of complete and accurate indices, of which the present volume possesses five, so that any given coin can be readily discovered.

So much for arrangement. With regard to illustrations, the plan pursued in this work is to insert separate woodcuts of all remarkable and unpublished coins. Probably many people would prefer to find several plates at the end of the volume

² A Catalogue of the Greek Coins in the British Museum. Vol. I. Italy. Printed by Woodfall and Kinder. Price £2 2s.

instead of woodcuts sprinkled over all the pages. This, however, is a matter of taste, and not easy to decide. These woodcuts are certainly in some cases successful, and their number is the most attractive feature of the volume. The Greek spelling of words is, we notice, in many cases substituted for the Latin; had this been done more consistently and completely it would have been better, and it is a pity that the over-use of terms such as *same* and *similar* cause a strain on the reader's attention. But small defects of this kind ought not to be dwelt on when Mr. Poole's work shows a decided advance in accuracy on previous catalogues, especially on Carelli's great work.

The strongest impression which remains on the mind, after looking over any catalogue of Italian coins, is of pleasure at the healthy freshness they show in the enjoyment of nature; perhaps it would be going too far to call that enjoyment worship. Trees, flowers, and crops, the insects of the corn-field, and the fishes of the river, appear in the most natural and pleasing aspects on the coins of Cumæ, Neapolis, Metapontum, and other cities. One sees how these Western Greeks lived in the open air and rejoiced in tilling the fields. No place could be a more appropriate scene for the charming seventh idyll of Theokritus than Velia; nor could genuine pastoral poetry have arisen except among a race who joined Greek taste to the Italian country life. The interest and charm which in this aspect attaches to Italian coins almost makes up for their comparative deficiency in historical and archæological interest. Such deficiency, however, can only be considered as comparative, not as absolute, or a writer with the genius of Mommsen would scarcely have spent so much time in their study. It may, however, fairly be said that the recent labours of Mommsen and others have quite exhausted the subject of Italian coins in an archæological point of view, and that few questions remain of importance, as to which we may expect light from volumes like the present.

In the case of Sicily it is quite otherwise. Except the antiquated volume of Castelli and the scarcely-commenced work of Salinas, we have hardly any book of value treating of the very interesting coins of Sicily. And it is certain that a close and careful study of those coins would enable one to fix the date of each with very far greater exactness than is the case in Italy, so as to give really interesting historical indications. We therefore welcome the announcement that a catalogue of coins of Sicily is in progress at the Museum, and hope it may not be very long before it may appear.

MISCELLANEA.

COINS OF HENRY I. FOUND NEAR BATTLE, SUSSEX.—The following twelve coins of Henry I. were placed in my hands in October, 1870, by E. M. Dewing, Esq. They were found in 1860 (?) near Battle, and are now in the possession of the Rev. R. F. Whistler, M.A., Rector of Ilketshall St. John, Bungay, Suffolk. The legends of all are more or less imperfect; there are traces only of the letters dotted below.

The types of the coins are as follows:—No. 4, Hawkins (Ruding, Suppl., Pl. i. fig. 6); No. 6 Hawkins (*Hawk.*, fig. 255), and No. 9, Hawkins (*Hawk.*, fig. 258).

Only one specimen of the first and last occurs, both types being rare, especially the last, of which, according to Mr. Hawkins, only four specimens are known, three of them being in the British Museum.

(A.) Type of No. 4.

1. *Rev.*—SPIRTIC . ON LVND. (London.)

Moneyer not in Ruding: the name occurs among the moneyers of William I. (Ruding, vol. i. p. 157. Third ed.)

(B.) Type of No. 6.

1. *Rev.*— . . . EAT . . ON BRIS. (Bristol.)

2. *Rev.*— . . . ON EXCE. (Exeter.)

No coins of Henry I. belonging to this mint are mentioned by Ruding.

3. *Rev.*—EDRIC[VS] ON HERE. (Hereford.)

This moneyer is not among those of Henry I. given in Ruding, who mentions one of the same name under Stephen.

4. *Rev.*— . . . ET ON PINC. (Winchester.)

Another coin has also PINC, but not a letter of the moneyer's name can be read.

There are six other coins of this type, the reverses of which are illegible, so that neither moneyer nor mint can safely be determined from them. On one only can either of them be rationally conjectured; REMAN can be read securely, which is preceded by E or F apparently: if the name was HEREMAN, as seems not improbable, it is not found in Ruding; indeed, there is nothing like this name among his moneyers of Henry I.

(C.) Type of No. 9. (But with cross in the centre of the reverse, as figured in Ruding, Suppl. II., Pl. i. fig. 3.)

1. *Rev.*—[PV]LFPINE (on outer circle.)

[ON] LVNDENE (on inner circle.) (London.)

The mint is certain; the moneyer (Wulfwine) somewhat uncertain.

CHURCHILL BABINGTON.

SALE OF A REMARKABLE COLLECTION OF SCOTTISH COINS IN EDINBURGH.—On the 22nd of April Mr. Dowell disposed by auction of one of the most extensive collections of Scottish coins ever publicly sold in Edinburgh. Some time ago the Society of Antiquaries of Scotland acquired by purchase from the Faculty of Advocates the well-known cabinet of coins bequeathed to them nearly two hundred years ago by Mr. Sutherland. This collection contained many rare and fine duplicates, especially in the gold series, and it was determined to sell these, along with some others belonging to the Society. The sale catalogue comprised 350 lots, which included a small collection of English gold. The prices realised were very high, as might have been expected from the historical interest attaching to the collection. Among the principal rarities were the lion with tressure of Robert II., of which but one other specimen is known to exist—£12. St. Andrews of James I.—£9 and £7. St. Andrews of James II.—£10 and £26. The half St. Andrew—£14. Rider of James III.—£7. Unicorn of James IV., with numeral—£14; half unicorn—£19; half rider—£7; quarter rider—£10. James V. écu, PER LINGNV, &c.—£15. Two-thirds of bonnet piece—£11 and £10. Mary ryal—£14; half ryal—£13. James VI. lion, 1588—£14; two-thirds of lion, 1587—£50; one-third of lion, 1584—£60; hat-piece, 1593—£7.

In the silver, the halfpenny of Robert Bruce brought 32s., and the farthing, though fractured, 40s. A Stirling groat of James I., in splendid order—£3 10s. An Aberdeen groat of James II.—£5; another—£4 10s. A Berwick groat of James III.—£2. A groat of James III.'s fifth coinage—£4 4s.; another of his sixth coinage—£4 14s.; another—£3 5s. A groat of James IV.'s fifth coinage—£3 12s. 6d. Mary testoon of 1562—£7. Thistle noble of 1581—£14; and half thistle noble of 1581—£10. The prices got for the billon and copper coins, which comprised many exceedingly rare varieties, were also very high. The whole sale produced upwards of £800.

XI.

ON SOME INTERESTING GREEK COINS—ATHENS, ACHAIA, SICYON, SUSIANA.

I wish to make more widely known a few very interesting Greek coins, now in the British Museum, and either unpublished, or not before correctly described.

1. An archaic tetradrachm of Athens (Pl. VII., fig. 1.)

Obv.—Gorgon-head.

Rev.—Bull's head, facing, in an incuse square.

Size 8. Weight 254·3 grains.

The Gorgon-head on the obverse of this coin is unmistakable, and in a moment connects it with the tetradrachms generally ascribed to Athens, and frequently found in Attica, which bear the same device. The reverse type is apparently quite new, and thus we find another added to the many varieties of the early Athenian coinage, before the owl came into fashion and superseded all other types. Archæologists have attributed to Phocis a didrachm with a bull's head facing on the obverse and the Attic incuse on the reverse. (Pl. VII., fig. 2.) The tetradrachm described above just furnishes the missing link which may enable us to class this also with the Athenian coinage. The bulls on these two coins are much alike, and the reverse of the didrachm is Attic, and not, so far

as we know, at all connected with Phocis. Other circumstances point in the same direction. At Phocis the Æginetan scale was in use, the present didrachm is of Attic weight; besides, I have the authority of Professor Rhousopoulos for the assertion, that coins like it are sometimes dug up close to Athens. We can hardly be mistaken, therefore, in removing this didrachm from the series of Phocis to that of Athens; especially as its attribution to Phocis was, I believe, conjectural, and based only on the analogy of the later coinage of that district.

An interesting question, and one which has much puzzled archæologists, is thus raised. There was a tradition at Athens that their present coinage had been preceded by didrachms bearing the figure of a bull, and so called βόες. Some carried these back to the days of Theseus; all agreed that they dated from a remote antiquity. The didrachm which I have just claimed for Athens from Phocis comes nearer to the βούς than any coin known. It is true that the head of a bull is not the figure of one,¹ and this is of course a great difficulty, the only one in the case. But when we consider how thoroughly excavated the soil of Athens has been, it must be conceded that it is almost impossible that there should yet remain hidden in it many of these ox-type coins of which not one has been found. It is also impossible to believe that so lasting and wide-spread a coinage as the Athenian antiquaries describe could have passed away without leaving substantial vestiges. We are therefore driven on to one or the other horn of this dilemma—either the didrachm which suggested these remarks is the true Attic βούς, or the Attic βούς never existed at all.

¹ βούν ἐγχαράξας, Plutarch. ὅτι βούν ἔιχεν ἐντετυπωμένον, Pollux. See below.

It will be worth while to glance at the evidence for its existence. In the first place, Æschylus² makes use of the curious expression, βούς ἐπὶ γλώσση βέβηκε. The words are put into the mouth of one who has grave reasons for keeping silence, and the traditional interpretation, confirmed by Pollux, is, "I am bribed to silence," the bous being supposed to be the coin weighing, so to speak, on the tongue and keeping it down. Theognis of Megara makes use of a similar expression, which, indeed, seems to have been proverbial. But whether any ox-type coins ever existed or not, I quite agree with all recent editors of Æschylus in thinking that the proverb quoted makes no allusion to them. "An ox is standing on my tongue," or even, as Æschylus puts it, "a great ox," is a sort of Oriental metaphor to express the moral impossibility of speaking. The watchman of Æschylus was not bribed to silence (if he had been, the great dramatist would scarcely have made him boast of it), but was silent from fear. If any further argument were wanted, it would be supplied by the fact that Menander uses a parallel phrase, ὄς ἐπὶ στόμα, certainly without reference to coins.

But there comes the further question, were there ever any Athenian coins stamped with an ox? Certainly, at first sight, it seems very bold to question what tradition so widely affirms. Plutarch³ asserts that Theseus first struck them, perhaps taking the type from the Minotaur. Pollux⁴ and other late writers, in addition to several scholiasts, bear testimony to a tradition of their existence. But Pollux himself at the same time gives us some information which shows how the tradition may easily

² Agam., 36.

³ Life of Theseus, xxv. 5.

⁴ Pollux, ix. 60. Cf. Schol. Arist. Aves, 1106, &c.

have arisen apart from fact. He says that at Delos the heralds, in proclaiming a reward, proclaimed it as of so many βόες—a βοῦς, it appears, being considered as equivalent to a didrachm. We can perfectly understand how this would take place. At an ancient festival like that of Delos the various forms of words used would be religiously kept up, and long after payments had ceased to be made in cattle, the heralds adhered to the ancient phrase, the term βοῦς having a conventional value fixed to it. But in later times, when every one had forgotten why the term βοῦς was used in this sense, traditional explanations would arise, and one might judge *à priori* that they would certainly be wrong. One of the most natural explanations in view of the fact that later Athenian tetradrachms were termed γλαῦκες, would be that at Athens or Delos ⁵ (as some reported) there had once been didrachms marked with an ox, and so called βόες. This is precisely in keeping with what we know of Greek rationalistic explanations of a late date. We, who are far harder of belief, can scarcely imagine any one accepting this explanation unless he knew of the existence of a bull-stamped coin. But we must not judge of the Greeks by this standard. Pollux calmly asserts, in the same passage, that there were at Athens triobols with a head of Zeus on the obverse, a thing almost impossible, because totally contrary to the spirit of Athenian coinage. And of the rapidity with which a vaguely invented myth would pass for sound history, we have an excellent proof in the fact that the horse Bucephalus had been dead but a score or so of years when he was figured on coins ⁶ with the

⁵ Pollux, l. c. This shows how careless the author was in matters of detail. He did not take the trouble to ascertain whether the partizans of Athens or of Delos were in the right.

⁶ Those of Seleucus Nicator.

horns of an ox—a vain imagination, produced entirely by a foolish attempt to explain his name.

This theory appears to me fully to account for the widespread tradition of the *βοῦς* coins. Every time the herald at Delos made proclamation, people would ask one another, "Why does he use that curious form of expression,⁷ and why is a didrachm reckoned the equivalent of an ox?" And of course, on principles of natural selection, the most plausible explanation would survive and be everywhere propagated. And finally, it would press into its service the current proverb, *βοῦς ἐπὶ γλώττῃ*, and twist it to suit itself.

I cannot, then, think it to be at all demonstrated that there ever were coins at Athens bearing the figure of a bull. If some Athenian coin must be called the *βοῦς*, in deference to tradition, let it be the didrachm which I would assign to Athens; and if any one objects, let him produce any coin with a better claim to the title. And it is likely, at any rate, that a floating tradition of the past issue of coins such as we now know Athens to have struck, with bovine types, may have tended to induce people to ascribe the *βόες* to her rather than to other states.

2. Two hemidrachms of Achaia (Pl. VII., fig. 3 and 4.)

Obv.—Head of Zeus Homagyrius, right, laureate.

Rev.—X within laurel wreath.

Size 3. Weight 40 grains.

⁷ I am reminded that some people would explain the use of the term *βοῦς* in payment at a late date by the fact that early weights were often made in the shape of animals; the early *βοῦς*, then, would be a weight of uncoined metal. But this subject is quite apart from the tradition I am discussing, which is of coined didrachms.—Cf. Dictionary of the Bible, article "Money."

Obv.—Female head, left, (nymph or local heroine).

Rev.—ΑΧΑΙΩΝ. Pallas advancing, right, with spear and shield.

Size 3. Weight 39·2 grains.

These coins have long been at the British Museum, and cannot be called unpublished, the former appearing in Payne Knight's catalogue;⁸ the latter being mentioned in Mr. Warren's "Federal Coinage."⁹ But these previous descriptions are incorrect; and the historical importance of the coins has not been noticed. It has been acknowledged that the Achaian league of Roman times was a revival in a different and far stricter form of a confederacy which had existed almost from pre-historic times among the cities of Achaia. It is, however, generally supposed that this confederacy was a somewhat loose one, and the argument that there existed no coinage of the earlier Achaian league has sometimes been brought forward in favour of this view. Naturally and truly, the custom of striking money in common by several cities is supposed to indicate a close connection between them. Some importance, therefore, attaches to the fact that the Achaians, before the dissolution of their confederacy by Macedon, sometimes struck silver money in common. The two coins above described belong, beyond question, to the pre-Alexandrine period of Greek art. They present, as to style, a very marked contrast to the barbarous pieces struck by the later league, which they also considerably excel in weight. It is unfortunately impossible to fix their date accurately, but we can scarcely be far wrong in assigning them to about the year 340 B.C.,

⁸ P. 16, A 4; also in Leake.

⁹ P. 34. Mr. Warren, however, calls the figure on the reverse Artemis, and gives the coin a later date than 280 B.C., which seems quite impossible.

when the league was at the height of its power—just before the battle of Chæroneia. The head of Zeus resembles that on the coins of Alexander I. of Epirus; the beautiful female head, the hair of which is confined in a most tasteful manner by a fillet, and the figure of Pallas, remind us of the coins of Tegea, Pellene, and other South Greek cities, struck before the liberties of Greece were prostrated by Philip II. of Macedon.

3. Didrachm of Sicyon. (Pl. vii. fig. 5.)

Usual types; on the obverse a graffito carefully punctured with some pointed instrument to this effect—

APTAMIPOΣ ΤΑΣ ΕΑΚΕΤΑΣ ΑΜΟΝ.

Thus, at least, after long and careful study, I believe it to run, although it is right to add that the T of ΕΑΚΕΤΑΣ might be a Γ, that the A of ΑΜΟΝ is indistinct, and that at the end of that word is a mark which might stand for an I, although I believe it merely to indicate the end of the inscription, there being a similar mark at the end of the first word. The first two words and the last need cause no difficulty; they are the regular Doric forms of Ἀρτέμιδος, τῆς, and ἡμῶν. The form ΕΑΚΕΤΑΣ is, however, almost inexplicable; it would seem to represent some attribute of Artemis, and, in default of any better theory, we are driven to imagine that it may perhaps have been an adjective connected with the verb ἔλκω, and signifying either “bow-drawing” or “withdrawing from trouble,” or possibly alluding to the function of Artemis in child-birth. The interpretation of the inscription in this case would be “Dedicated to Artemis¹⁰ our deliverer,” or to “Artemis our helper in child-birth.”

It appears, then, that the present inscription is a dedi-

¹⁰ The word *ἱερὸν* being understood, which regularly in this connection takes the genitive case. See below.

cation of the coin on which it is engraved to Artemis. I am indebted to the kindness of Mr. Newton for references which may serve to explain how this might take place. Firstly, coins were frequently thrown into wells, in order to gratify the deities to whom they were sacred. "Near the Amphiaræon was a spring called the Fountain of Amphiaræos. This was not employed for sacrificial uses, nor for lustrations, but when any person had been relieved from disease by consulting the oracle he threw into the spring gold and silver coins."¹¹ And, secondly, it seems, from an inscription published by Boeckh, that pieces of money were sometimes fastened with other offerings on the walls of temples. This remarkable monument enumerates, among other dilapidations in the Temple of Amphiaræus, the falling of coins and ornaments from the memorial tablets on the wall. On this Boeckh¹² remarks: "*Igitur hæc numismata et alia argentea et aurea ornamenta affixa erant donariis quæ ad parietem collocata erant; hæc vero numismata et ornamenta deciderant, soluta ligatura sive ferrumine.*" Lucian,¹³ again, speaks of votive coins affixed to the statue of a divinity: *νομίσματα ἐνία ἀργυρᾷ πρὸς τὸν μηρὸν κηρῷ κεκολλημένα.* And Mr. Newton¹⁴ found traces of this custom in Asia Minor in the shape of Turkish gold coins affixed to the images and pictures of saints with wax. It is intrinsically probable that the offerer of a coin might engrave upon it words

¹¹ Pausan., i. 34, quoted by Mr. Newton in the Proceedings of the Royal Society of Literature, 2nd series, vol. v., p. 147. Hordes of coins, as, for instance, the Vicarello find, have been discovered in wells.

¹² Boeckh, C. I., i. p. 747.

¹³ Lucian, Philopseudes, c. 20.

¹⁴ "Travels and Discoveries in the Levant," vol. i. p. 87, and vol. ii. p. 5.

denoting his desire or his gratitude; but I find no positive proof that such was the custom, with the exception of the coin before us, which may perhaps be unique. There is, however, in the British Museum a tablet¹⁵ recording the offerings made to the Temple of Artemis Brauronia, and among these we find mention made of an ἀμπέχονον, or shawl, inscribed with the words Ἀρτέμιδος ἱερὸν. If such phrases were written or embroidered on garments, we need be very little surprised to find them punctured on coins.¹⁶

4. Copper coin of a ruler of Characene.

Obv.—Head like that of a Parthian king, left (Kamnaskires?), diademed and with ear-ring; behind, anchor, inverted and surmounted by star.

Rev.—ΗΡΑΚΛΗC, and some uncertain letters, enclosing a bearded head, diademed, to left.

Size 7. (Plate VII., No. 6.)

I am induced to publish this coin, although it belongs to a class already treated of by Mr. Vaux in the Numismatic Chronicle,¹⁷ because it is remarkable in some respects, and has not been separately published or engraved. The head on the obverse, from its likeness to that of Kamnaskires, even down to minute details of dress, must be concluded to be either his or that of an immediate successor. The legend of the reverse I might

¹⁵ Published by Boeckh, C. I., vol. i. p. 246, and destined, we may hope, to reappear in still more correct form, in the Corpus of British Museum inscriptions.

¹⁶ The intentional defacing of coins in the case of their being offered to the divinities of springs or rivers was an obvious preservative against their being again appropriated by the profane to the purposes of ordinary commerce. In the river Seine, near Paris, numerous Gaulish coins of gold have been found, all of them defaced in the same manner by a cut from a chisel across the head on the obverse. There can be but little doubt of these coins having been votive offerings to the divinity of the river.—J. E.

¹⁷ Vol. xviii. p. 140.

have supposed to be merely a barbarous rendering of his name, had not the accurate and experienced eye of M. de Saulcy, in lighting on it, at once detected the name of ΗΡΑΚΛΗΣ, and certainly all the letters of that name can be discovered by a careful observation. Mathematicians know how many chances there are to one that a random collection of letters will fail to produce an intelligible word; and therefore we are justified in assuming that the engraver meant to produce the name Herakles,¹⁸ and that Herakles was a real person. Accepting fully Mr. Vaux's theory that Kamnaskires reigned in or near Characene, we must attribute the present coin also to that region, and the only question that remains is whether this Herakles was the successor or the satrap of Kamnaskires. He may have been a Greek soldier of fortune, for these abounded in the East after the time of Alexander; and the smaller head on the reverse of the coin may perhaps be intended for a portrait of him.

I publish this coin with much diffidence, and chiefly with the view of directing the notice of collectors and keepers of museums to a class of coins which has not received such attention as it deserves. There are a number of coins in appearance like the present, and, like it, bearing the anchor of the Seleucidæ in a prominent place in the field. Of these some bear a head like that of Kamnaskires, some a late Parthian or early Sassanian head, full-face, and a well-defined inscription in Pehlvi characters. If some one well acquainted with the Pehlvi letters and the antiquities of Susiana would but study these, the results to numismatic science might be excellent.

PERCY GARDNER.

¹⁸ The name Herakles was very rare in Greece, but may have been less so in the East. We know that it was bestowed on the son of Alexander and Barsine.

XII.

COINS OF ALEXANDER'S SUCCESSORS IN THE EAST.

(*Conclusion.*)

BY MAJOR-GENERAL A. CUNNINGHAM.

ON THE MONETARY SYSTEM OF THE GREEKS OF BACTRIANA, ARIANA, AND INDIA.

THE coinage of the Eastern Greeks, which I have attempted to describe in the foregoing pages, presents several very important deviations from the systems followed by their countrymen in Europe and Western Asia, which I now propose to examine in some detail. The weights of the various coins from Diodotus to Hermæus show that the Eastern Greeks followed the monetary system of Athens, which had been already adopted by Alexander the Great and his immediate successors. To this system the Greek kings of Bactriana steadily adhered; but the Greek kings of India, from the very first, departed from the Attic system in the mass of their copper money, as shown in the coins of Pantaleon and Agathokles, which are of the same weight, and of the same square shape, as the previously existing Indian money.¹ They also reproduce the same type of

¹ It is a curious fact that the first two Mughal Emperors of India, Bâber and Humâyûn, adhered to the style of coinage of

the maneless Indian lion on the reverse, and even exhibit the same peculiarities of fabric in the deeply indented small square die of one side, and the loss of one or more corners, by the adjustment of the original square or oblong blank piece of metal to the required weight. A few copper coins of Agathokles also show the adoption of the sacred *Bodhi* tree surrounded by a Buddhist railing, and of the Indian symbol, which is usually called a *Chaitya*, but which I believe to be a conventional representation of Mount Meru. The square form thus introduced by the first kings was continued down to the close of the Greek rule under Hermæus, when it disappears suddenly with the advent of the Indo-Scythian princes.

Another novelty was the introduction of a nickel coinage by the Indo-Grecian kings. Pantaleon and Agathokles, which was copied by Euthydemus. The use of nickel is confined to the money of these three princes — by previous writers these nickel coins had always been described as silver; but when I began to write the present account of these Eastern Greek coins I was led to examine them more carefully, and as I felt satisfied that they were not silver, I placed them in the hands of my friend Dr. Walter Flight, of the British Museum, who kindly undertook to make a quantitative analysis of a coin of Euthydemus. The result was most unexpected, as it revealed the fact that these coins owe their whiteness *entirely* to the presence of nickel, which amounts to as much as 20 per cent., while the mass of the metal, or upwards of 77 per cent., is pure copper, the remainder being composed of small quantities of cobalt, iron, tin,

their own country; but their successors adopted the Indian system of coinage, which was in general use, and which they found it impossible to suppress.

and sulphur. This coinage, therefore, as Dr. Flight remarks, "essentially consists of an alloy of copper and nickel," the proportions differing but little from that of the 5 and 10 centime pieces of Belgium, which are composed of 70·4 of copper and 25·55 of nickel. Much interest was excited by this discovery, as "nickel was first shown to be a metal by Cronstedt in 1751." But although the use of nickel is comparatively recent in Europe, yet, as Dr. Flight observes, it has "formed a very constant constituent of some of the alloys known to the Chinese, especially *packfong*, *tutenag*, and *white copper*. The last alloy is composed of copper 79·4, nickel, 16·02, and iron 4·58, which is almost the same as that of the Indo-Grecian and Belgian alloys. Dr. Flight subsequently made a qualitative analysis of another white coin of Euthydemus, two coins of Agathokles, and one of Pantaleon, all of which gave precisely the same results, as they were found to contain much copper, and a considerable amount of nickel, with a little iron, a trace of tin, and no silver.

It would be very interesting if we could ascertain from whence this nickel was procured. I incline to the opinion that it must have come from China. Quintus Curtius, however, mentions that, near the junction of the Five Panjâb Rivers, Alexander received from the Oxydracæ and Malli, a present of 100 talents of "white iron," (*ferri candidi*).² I conclude that this was certainly not tin, which is a soft metal, and was besides very well known to the Greeks. But as nickel is both hard and magnetic, as well as white, it might be justly described as *white iron*. In the Greek Anthology also I find mention

² Vit. Alexand., ix. 8.

of an "Indian brass as white as silver," by the poet Krinagoras, who was a contemporary of Strabo.³

Χάλκεον ἀργύρεω με πανείκελον, Ἰνδικὸν ἔργον,
 "Ὀλπην, ἡδίστου ξείνιου εἰς ἑτάρου,
 *Ἡμαρ, ἐπεὶ τὸ δε σείω γενέθλιον, ὑπὲ Σίμωνος,
 Πέμπει γηθομένην σὺν φρενὶ Κριναγόρης.

Which I translate as follows :—

"This drinking-cup of Indian brass,
 As silver white, Krinagoras,
 To Simon's son, his best of friends,
 A loving birth-day present sends."

I think it possible that the names of "white iron," and "white or silvery brass," like that of "white copper," may refer to one of the Chinese alloys of nickel. Commerce has always been active between India and China, and it was very easy for a merchant to reach the Panjâb and Kabul from the western coast of India. One of the Buddhist legends in fact refers to the shipwreck of *Kāka-Prabhāsan*, a "merchant of Taxila," on the east coast of India.

At what value these nickel coins passed current can only be conjectured; but it seems probable that they may have been *oboli*, as I notice that the three nickel-striking kings have no silver oboli, while, on the contrary, their contemporary Antimachus I., as well as their successors Demetrius and Eukratides, all have silver oboli, and no nickel coins. The one would therefore appear to have been intended as a substitute for the other; but the nickel coins soon fell into disuse, either from some inconvenience, or from the difficulty of procuring a

³ Anthologia Græca. Lipsiæ, vi. 261. With reference to the name of *Olpe* I may mention that the relic-caskets found in the Buddhist Topes of the Panjâb are now called *Harpa*.

sufficient supply of the metal. No trace of nickel has yet been discovered in any of the purely Indian coinages.

I now come to the consideration of the influence which the previously existing Indian money had upon the monetary system of the Greeks, who ruled over the Kabul valley and North-west India. The monetary system of Athens is well known; but for the purpose of comparison with that of India it is necessary to give the names and weights of the various coins of both systems in some detail.

The silver drachma was the unit of the Athenian money. Its exact weight has not been absolutely determined; but it is generally admitted to have been somewhat over 67 English grains. For the sake of convenience of calculation I have adopted the value of 67·2 English grains, which differs by only one-hundredth of a grain from the mean value deduced by no less than eleven of the principal writers on the subject:—

1	Greaves	67·00 grains.
2	Bernard	67·00 "
3	Eisenschmidt	68·20 "
4	Birch	68·00 "
5	Raper	66·50 "
6	Barthelemy	67·24 "
7	Letronne	67·37 "
8	Hussey	66·50 "
9	Leake	67·50 "
10	Böckh	67·37 "
11	Lenormant	66·69 "
Mean of 11 = 67·21 English grains.		

The learned Böckh adopts the valuation of Barthelemy of 67·24 English grains, which is almost the same as the mean value just obtained. In the Masson collection at the East India Museum there is a bronze *astragalus*, or knuckle-bone, weighing 402 grains, which I take to be a weight of 6 *drachmas*, or one-thousandth part of a talent. If this assignment is correct, the *astragalus* gives exactly

67 grains to the drachma. I believe therefore that the value which I have adopted of 67·2 English grains is as nearly accurate as it is now possible to determine. The convenience of this value is very great; for it is not only a finite fraction itself, but it is continually divisible by 2, as a finite fraction, down to 0·7 of a grain, or one-sixteenth of an obolus. It also gives the whole number of 112 grains for 10 oboli, and fixes the Phœnician drachma at 56 grains, the Macedonian drachma at 112 grains, and the Hebrew shekel at 22·4 grains, all in whole numbers. It makes its own talent equal to 57·6 English pounds, with a finite fraction, and makes other talents equally compact, and therefore readily convertible into English money.

The gold coin of Alexander was the stater, a piece of 2 Attic drachmas in weight, or 134·4 grains, and the counterpart of the Persian daric.

The silver coins of Alexander and his successors, the Greeks of Syria, Bactriana, and India, were the following multiples and divisions of the drachma:—

ATTIC SILVER.			
1	Dekadrachmon	10 drachmas	672·0 English grains.
2	Tetradrachmon	4 "	268·8 " "
3	Didrachmon	2 "	134·4 " "
4	DRACHMA	1 "	67·2 " "
5	Tetrobolon	4 oboli	44·8 " "
6	Hemidrachma	3 "	33·6 " "
7	Diobolon	2 "	22·4 " "
8	Trihemibolon	1½ "	16·8 " "
9	Obolus	1 "	11·2 " "
10	Hemibolon	½ "	5·6 " ⁴
11	Tetartobolon	¼ "	2·8 " ⁵

⁴ At the Borrell sale there was sold a *hemibolon* of Athens weighing 5·7 grains.

⁵ There are two specimens of the Tetartobolon in the British Museum, weighing only 2·5 grains each.

Specimens of all these denominations are found amongst the coins of the Greek princes of Bactriana and India, excepting only Nos. 1, 8, and 11.

The copper coins of the Seleukidæ, the successors of Alexander in Syria, adhere very closely to the weights of the silver money, the unit being the *chalkous* of about one drachma in weight. The actual weights vary very much, as indeed might be expected in copper coins. Amongst 145 specimens which I have weighed, I find large coins of Seleukus I. ranging from 59 to 70 and 73 grains, and smaller ones of 35 and 19 grains:—large coins of Antiochus I. from 57 to 68, and smaller ones from 30 to 35, the lowest being 19 grains. Other classes range up to 130 grains, 190 grains, and from 261 to 273 grains, and in the single case of Antiochus IV., Epiphanes, up to 518, 551, and 563 grains. The mean of five of these large coins would give a tetradrachmon of 269·2 grains, and a drachma of 67·3, or only one-tenth of a grain higher than the standard which I have adopted. I conclude therefore that the copper coins of the Seleukidæ followed the same system of weights that was used for the gold and silver money. The *chalkous* or copper unit would therefore be equal to 1 drachma in weight, or 67·2 grains, which gives the rate of silver to copper as 48 to 1, as 6 obols \times 8 chalki give 48 chalki to the drachma. As the rate in India at the same period was 50 to 1, I have no hesitation in adopting the above rate of 48 to 1 for the copper coins of the Seleukidæ of Syria, as well as for the Greek kings of Bactria. According to this conclusion the weights of the various multiples and divisions of the *chalkous* will be as follows:—

ATTIC COPPER.			
8 Chalki	.....	1 obolus	537.6 grains.
6 "	Tritemorion	$\frac{3}{4}$ "	403.2 "
4 "	Hemiobolion	$\frac{1}{2}$ "	268.8 "
3 "	Trichalkon	$\frac{3}{8}$ "	201.6 "
2 "	Dichalkon	$\frac{1}{4}$ "	134.4 "
1 CHALKOUS	.....	$\frac{1}{8}$ "	67.2 "
$\frac{1}{2}$ "	Lepton	$\frac{1}{16}$ "	33.6 "
$\frac{1}{4}$ "	Hemilepton	$\frac{1}{32}$ "	16.8 "

The quarter, the half, and the three-quarter obolus were frequently made of silver; but in the Selenkidæ series there are several examples of the hemiobolion in copper, and even of the full obolus in the single case of Antiochus IV., Epiphanes. Copper oboli are in fact mentioned by Lucian. The *chalkous* itself was, as its name implies, always of copper, although its equivalent, the *kollybus*, had been a silver coin. According to Pollux the *chalkous* contained seven *lepta*, which is a division hitherto unheard of either in weights or measures, and which I firmly believe could never have been used on account of its extreme inconvenience. According to my view the *lepton* was one half of the *chalkous*, a value which I have adopted for the following reasons:—the word *λεπτος* means “husked,” and must therefore refer to a “husked grain of barley,” which was the smallest weight in the Greek scale, just as the *lepton* was the smallest piece of money. Speaking of the *Lapis Lydius*, or touchstone, Theophrastus,⁶ mentions that “the assays are taken from the smallest quantity, for the least weight is a grain of barley, the next the *Kollybus*, then the quarter, then the half obol, from which they ascertain the amount of the alloy.” According to this account the *lepton* was one-sixteenth of the obolus in weight, that is $\frac{1}{16}$ of 11.2

⁶ King, p. 52.

grains, or exactly seven-tenths, 0·7, of an English grain, which is in fact the actual weight of a grain of "husked barley,"—Maimonides (or Mâmun), quoting the Misna, makes the *mea*, or later Jewish obol of 11·2 grains, consist of 16 barley-corns, each of which was therefore 0·7 of an English grain.

Originally the *lepton* was not a coin, but simply the smallest practical weight applied to gold and silver. But seven-tenths of a grain of silver being equal to 48 times that weight of copper, the *lepton*, after the introduction of copper money, became an actual coin, weighing 33·6 grains, or one-half of the chalkous. The same value of the *lepton* may also be deduced from a comparison of a passage in Polybius with a well-known saying of St. Mark. From the first we learn that the *assarion* was equal to half an obolus, or 4 chalki.⁷ The Roman quadrans was therefore equal to the chalkous; and as St. Mark says that the quadrans contained two *lepta*,⁸ the *lepton* must have been exactly one-half of the chalkous. It follows also that the *kollybus*, which ranged between the lepton and quarter obol, must have been one-eighth of an obol, or 1·4 grain of silver, and was therefore of the same value as the chalkous.

The Indian monetary system was essentially original, as it differed from the Greek, and from all other systems, in its unit of weight, as well as in its scale of multiples. The *yava*, or "barley-corn," is not known to Hindu metrology, but the unit of the system is the *rati*, the bright red and black seed of the *gunja*, or hemp plant (*Abrus precatorius*), the whole of the Indian money, whether of gold, silver, or copper, being certain multiples

⁷ Polyb., ii. 15.

⁸ St. Mark's Gospel, xii. 42: Λεπτά δύο, ὃ ἔστι κοδράντης.

of this one well-known unit. The Assyrian and Lydian, and the Babylonian and Persian systems, as well as that of the Greeks, were raised chiefly by *sizes*, while the Indian system was raised by *fours*, with a sparing use of *fives* in the higher multiples. Its nomenclature also is quite different, and the common form of the money is not round, but square. Altogether the differences are so great and so marked, that I have no hesitation in stating my conviction that the Indian monetary system is the original invention of the Hindu mind.

The *rati*, in Sanskrit *raktika*, or the "red seed," is also known by the name of *tulavija*, or "weight seed." It is still used all over India, and from 1849 to 1863 I collected several thousands of seeds at ten different places, from Taxila to Multan in the Panjâb, from Haridwâr on the Ganges to Chânderi in Malwa, and from Kosâmbi on the Jumna to Prome in Burma. Rejecting all the largest and smallest seeds out of the whole number of 5,327, I found, on the 21st March, 1869, when they were all thoroughly dry, that one thousand sound and tolerably even-sized seeds gave an average weight of 1·823 English grains. The weighments made by other inquirers have given very nearly the same result.

	Grains.	
Sir William Jones . . .	1·8333	reading $1\frac{1}{2}$ instead of $1\frac{1}{4}$.
Sir Walter Elliot . . .	1·8127	Numismatic Gleanings, p. 87.
Shakespear . . .	1·7966	Hindustani Dictionary, <i>in voce</i> .
Mr. Laidlay . . .	1 8250	Weighed for me in Calcutta.
Author . . .	1·8230	

The mean of these five values is 1·8181 grains, or, if we omit Sir William Jones's result as doubtful, the mean of the four values is 1·8143 grains.

I obtained nearly the same value for the *rati* from a comparison of the weights of five other different kinds of

seeds, which are referred to in Indian tables of weight. Thus the *rati* seed is said to be equal to 5 rice seeds, or 3 barley-corns, to one-half of a *māshaka*, or small bean, to one-fifth of a *māsha*, or common bean, and to one-eighth of a *māsha*, or large black bean. My weighments of all these kinds of seeds gave the following results :—

	Grains.	Each.		Rati.
1,000 rice seeds	358·5	0·3585	× 5	= 1·7925
700 barleycorns, husked .	418·5	0·5978	× 3	= 1·7934
500 māshaka, small beans	1,791·0	3·5820	÷ 2	= 1·7910
60 bākala, common beans	546·0	9·1000	÷ 5	= 1·8200
10 māsha, black beans .	146·0	14·6000	÷ 8	= 1·8250

The average of these five kinds of grains gives 1·8044 as the approximate weight of the *rati*; and taking the two results 1·8143 and 1·8044, we obtain 1·8093 as the true value of the actual *rati*. But the weights of very few of the existing ancient silver coins come up to this high standard, although many of the copper coins reach it, and a few even exceed it. For all practical purposes, however, I find it extremely convenient and sufficiently accurate to assume the value of the *rati* at 1·75 English grain, which is the value that has already been adopted by Mr. Thomas on the evidence of the coins themselves.⁹

The most ancient coins of India were the *pana* of copper, the *kārsha* or *kārshapana* of silver, and the *suvarna* of gold, with their subdivisions. All of these are mentioned in the Laws of Manu and in the Buddhist Sutras. In Manu most of the fines are stated in sums of *panas*, from 1 *pana* up to 1,000 *panas*. The exceptions are 1 and 5 *māshas* of silver, 5 *raktikas* of gold or silver, 1 *māsha*, 1 *suvarna*, and 6 *nishkas* of gold.¹⁰ In another place

⁹ Ancient Indian Weights, p. 19.

¹⁰ Laws of Manu, by Haughton, viii. 274; xi. 142; viii. 138, 400.

Manu gives the weights of these different coins as follows,¹¹ to which I have added a few names from other sources :—

GOLD.

5 raktikas	= 1 māsha	= 8.75 grains.
16 māshas	= 1 suvarna	= 140.00 "
4 suvarnas	= 1 pala, or nishka	= 560.00 "
10 palas	= 1 dharana	= 5600.00 "

SILVER.

2 raktikas	= 1 māshaka	. . . . .	= 3.50 grains.
2 māshakas	= $\frac{1}{2}$ tangka	. . . . .	= 7.00 "
4 māshakas	= 1 tungku	. . . . .	= 14.00 "
2 tangkas	= 1 kona	. . . . .	= 28.00 "
16 māshakas	= 1 dharana, or kārsha, or purāna		= 56.00 "
10 dharanas	= 1 satamāna		= 360.00 "

COPPER.

80 raktikas	= 1 pana	= 140 grains.
40 "	= 1 ardhapana	= 70 "
20 "	= 1 kākini	= 35 "
10 "	= $\frac{1}{2}$ kākini	= 17.5 "

From the *Lilāvati* we learn that 16 *panas* were equal to 1 *dharana* or *kārsha* of silver, and in the *Amara Kosha* we find that the *pana* was also called a "copper *kārsha*," and the *suvarna* a "golden *kārsha*."

GOLD.

The actual weights of these coins are stated above; but all of them have not yet been found by our collectors. No one to my knowledge has seen a *suvarna*; but I possess two small gold coins, and there is a third specimen in the East India Museum, which appear to be quarter *suvarnas*. My two specimens weigh 33.75 and 33.25 grains respectively, which might possibly be taken for the quarter Greek stater. But I am not aware that such a coin ever existed in gold, and I think it more probable that these three coins are actual quarter *suvarnas* of 37.5

¹¹ Laws of Manu, viii. 134, 135, 137.

¹² Laws of Manu, viii. 136-404.

¹³ Wilson's Vishnu Purana, p. 653, note; "the half of a half of a half of a pana."

grains, the original weight of the old Hindu system prior to the invasion of Alexander. They are rather too heavy for the Attic scale, as the heaviest would give a drachma of 67·5 grains.

SILVER.

The silver coins are the most common of all the ancient Indian money. There were upwards of 200 specimens in the Mackenzie collection gathered in Southern India,¹⁴ about 500 in the Masson collection made in Kabul, and 373 in the Stacy collection made in North-west India, and there are 227 in the British Museum. Not less than 1,000 of these coins from all parts of India have been in my possession, but of this number 250 were received by exchange from the Stacy collection.

About one-fourth of these punch-marked coins are round or oval, and three-fourths square or oblong, the former being apparently the older, as the pieces are generally more worn, and are always of less weight than the square coins, which besides frequently preserve the marks of the chisel by which they were cut into blanks. Some of these punch-marked coins are upwards of one inch in length, by three-quarters of an inch in breadth, and very thin. But the general size is from half to three-quarters of an inch in length by half an inch in breadth.

The mint weight of these old silver coins has been fixed at 56 grains, which is that of the *kārsha*, or *kārshapana*, of Manu. Of the 10 best specimens in the British Museum Mr. Thomas found the average weight to be 52·98 grains, the heaviest being 54, and the lightest 52 grains. Of the 250 coins which I got from the Stacy

¹⁴ Col. Mackenzie notes that "these coins are very common throughout India, but particularly in the South."

collection I found no less than 22 of 54 grains, 1 of 54·5, 2 of 55, and 1 of 55·5 grains, the 10 heaviest giving an average of 54·4 grains. Of the 10 heaviest of my other specimens there are 2 of 56·5 grains, 1 of 56, 4 of 55·5 and 3 of 55 grains, the average being 55·6 grains. Thus the mean weight of the 20 heaviest coins that I have possessed is 55 grains. Good specimens generally weigh from 50 to 52 grains, but the great mass of the worn coins is much lighter, the average of 700, which I have weighed at different times, being only 47·82 grains.

To fix the value of these old Hindu *kārshas* we must ascertain the actual amount of pure silver that they contain, which varies very much in different specimens. For this purpose I had the following assays made during the course of the last twenty years :—

By native goldsmiths in India.

	Per cent.
20 coins at Gwalior	75·2 silver.
5 " Multan	75·6 "
12 " Rangoon	75·6 "
10 " Gaya	79·5 "
20 " "	85·7 "
10 " "	84·1 "
23 " "	76·1 "
4 " Naini Tal	86·3 "
<hr/>	
104 coins gave	79·76 per cent.

By Messrs. Johnson and Matthey, London.

	Per cent.
1 round coin	83·3 silver.
1 square "	79·4 "
1 " "	76·0 "
1 " "	76·0 "
1 " "	76·0 "
<hr/>	
5 coins gave	78·31 per cent.

By F. Claudet, Assay Office, London.

	Per cent.
1 coin gave	77·5 silver.
1 "	76·9 "
1 "	76·7 "
1 "	76·0 "
<hr/>	
4 coins gave	76·77 per cent.

Taking all the assays together, the result is that the 113 coins show a mean amount of silver equal to 79·05 per cent., which may be considered as equal to 80 per cent., or four-fifths, leaving the remaining one-fifth for copper alloy. The amount of pure silver in a full weight coin of 56 grains would therefore be only four-fifths of 56, or 44·8 grains,—which is exactly equal to 4 Attic oboli, or two-thirds of a drachma. Here then we see how well the *kârsha* would have fitted in with the Attic monetary system adopted by the Greek kings of Kabul. It is true that it was different in shape, and of a rude appearance; but these distinctive features were in its favour, as it could not be mistaken for anything else. It was a 4 obol piece even in the dark.

The half *kârsha* of the same fabric is very rarely met with. I possess three specimens, but one only appears to have been a complete coin originally, the other two being simply the halves of full *kârsha* pieces, made by cutting them in two. A large number (274) of half *kârshas*, but of a different kind, was found near Shâhjahânpur in Rohilkhand, of which I examined 150 specimens, all of which were thick oblong pieces. The mean weight was 25·34 grains; but I found no less than 11 specimens weighing 28 grains each, which fully confirms the full weight of 56 grains, which I have adopted for the *kârsha* itself.

In the cave inscriptions of Bombay mention is frequently made of the *pâdika*, which is said to be the one-hundredth part of a *suvarna*. But as its literal meaning is "one-fourth," the *pâdika* must also be the quarter of some well-known coin. This could only have been the *kârsha*, because 4 *pâdikas* were equal to one-twenty-fifth of the *suvarna*, which is the exact value of the *kârsha*. The *pâdika* was therefore the equivalent of the silver *tangka*

or $\frac{1}{4}$ *kārsha*, which is the same as the *panam*, or *funam*, of the present day,—whether of gold or of silver. Another name for the same coin was *pāddharana*, or the “quarter *dharana*.” This quarter *kārsha*, or silver *tangka*, I have never seen of the same fabric as that of the full and half *kārshas*. But I possess a number of small silver coins (51) of another kind from Mathura, which include specimens of the half, quarter, and one-eighth *kārsha*. The common mark upon these coins is the figure of a dog. Thirty-two of them assayed together yielded 81·9 per cent. of silver, which agrees very closely with the average out-turn of 79·05 obtained from the other coins. They are, however, quite different from them, both in appearance and in fabric.

COPPER.

The unit of the old Indian copper money was the *pana*, weighing 80 *ratīs*, or 140 grains.¹⁵ This was subdivided into halves, quarters, eighths, and sixteenths, of all of which I possess numerous specimens. All except the last division are mentioned by Manu, who fixes the amount of the ferry tolls at 1 *pana* for an empty cart, $\frac{1}{2}$ *pana* for a loaded man, $\frac{1}{4}$ *pana* for a woman or ox, and $\frac{1}{8}$ for an unloaded man. The *pana* is the unit throughout; and it was such a common and well-known sum that it was fixed as the daily wage of the lowest class of servants, in addition to their food.

But our collections contain many coins much heavier than the *pana*, of which the square copper pieces bearing an elephant and a lion, the prototypes of the coins of Pantaleon and Agathokles, are the best known

¹⁵ Laws of Manu, viii. 186. “A *kārsha*, or 80 *raktikas* of copper, is called a *pana*, or *kārshapana*.”

examples. From 34 of these coins I find that the average weight is 182·5 grains, that of Pantaleon's coins from 9 specimens being 181 grains, and that of Agathokles' coins from 15 specimens being 180 grains. The average of all three is 181·1 grains, which it will be remembered is just 100 times the mean weight of the actual rati seed as previously determined. There is no mention of such a piece of money by name, but as it is exactly one-fourth greater than the *pana* of 80 rati seeds, it must be the coin referred to by Manu, where he fixes the fine for cattle trespass at $1\frac{1}{4}$ *pana*.¹⁶ This sum no doubt refers to a decimal scale of money, which was reckoned in *panas* only: for in the later lawgiver, Yājñyavalkya, the scale of fines included $2\frac{1}{2}$, 5, 10, $12\frac{1}{2}$, 25, 50, 100, 200, 250, and 500 *panas*. Manu has also fines of 12, 25, 100 and 500 *panas*, and the decimal division of the *pana*, or 8 *raktikas*, is mentioned as the fine for an indolent servant.¹⁷ The weight of this coin would have been only 14 grains; but small as it seems, I possess several specimens of this "tenth of a *pana*," which range from 12 to 14 grains. I have also a few specimens of much smaller coins weighing only 7 to $7\frac{1}{2}$ grains, which must have been either one-sixteenth or one-twentieth of the *pana*. The latter is perhaps the more probable, as its value would have been exactly equal to one *ganda* of four cowrees.

The curious subdivisions $1\frac{1}{4}$ and $2\frac{1}{4}$ *panas* seem at first to have no connection with the silver portion of the Indian scheme, as the silver *kārsha* was equal to 16 copper *panas*. But on referring to the *suvarna*, or gold unit, which was equal to 25 *kārshas*, of silver, we see that 100 *panas* were equal to $6\frac{1}{4}$ *kārshas* or $\frac{1}{4}$ *suvarna*, so that there

¹⁶ Laws of Manu, viii. 240.

¹⁷ Ibid., viii. 215.

were 400 *panas* in the *suvarna*. The small sums of $2\frac{1}{2}$ and $1\frac{1}{4}$ *panas* were consequently equal to $\frac{1}{160}$ and $\frac{1}{80}$ of the *suvarna*.

The scale of Indian copper coins was as follows :—

		Grains.	
5 <i>panas</i>	. . .	700 to 720	
$3\frac{3}{4}$ "	. . .	525 " 540	
$2\frac{1}{2}$ "	. . .	350 " 360	
$1\frac{1}{4}$ "	. . .	175 " 180	
1 <i>PANA</i>	20 <i>gandas</i>	140 " 144	= 80 cowrees.
$\frac{1}{2}$ "	10 "	70 " 72	= 40 "
$\frac{1}{4}$ "	1 <i>kāḥini</i>	35 " 36	= 20 "
$\frac{1}{8}$ "	$\frac{1}{2}$ "	17.5 " 18	= 10 "
$\frac{1}{16}$ "	2 <i>gandas</i>	14 " 14.4	= 8 "
$\frac{1}{32}$ "	$\frac{1}{4}$ <i>kāḥini</i>	8.75 " 9	= 5 "
$\frac{1}{64}$ "	1 <i>ganda</i>	7 " 7.2	= 4 "

By comparing these weights with those of the copper coins of the Seleukidæ already given, it will be seen at a glance that the *pana* was but a trifle greater than a *dichalkon*, and that the quarter *pana* or *kāḥini* was a close equivalent of the *lepton*. The two systems of the copper money were thus in complete harmony. I am therefore quite satisfied that the old Hindu *panas* and *kāḥinis* passed current freely along with the *chalki* and *lepta*, as change for the Greek *drachmas* and *oboli*; and I have no doubt that cowree shells played an important part in all the daily purchases of the common people, just as they do now. The following table shows the comparative values of Greek and Indian money of all the usual denominations :—

COMPARATIVE VALUES OF GREEK AND INDIAN COINS.

GREEK.						INDIAN.					
GOLD.		SILVER.		COPPER.		SILVER.		COPPER.		SHELLS.	
Stater.	Drachms.	Oboli.	Chalki.	Lepta.		Karshas.	Tangkas.	Panas.	Kákinis.	Cowrees.	
1	20	120	960		equal	30	120	480		38,400	
$\frac{1}{2}$	10	60	480		"	15	60	240		19,200	
$\frac{1}{4}$	5	30	240		"	$7\frac{1}{2}$	30	120		9,600	
$\frac{1}{8}$	2	12	96		"	3	12	48		3,840	
$\frac{1}{16}$	1	6	48		"	$1\frac{1}{2}$	6	24		1,920	
$\frac{1}{32}$	$\frac{1}{2}$	4	32		"	1	4	16		1,280	
$\frac{1}{64}$	$\frac{1}{4}$	3	24		"	$\frac{3}{4}$	3	12		960	
$\frac{1}{128}$	$\frac{1}{8}$	2	16		"	$\frac{3}{8}$	2	8		640	
$\frac{1}{256}$	$\frac{1}{16}$	$1\frac{1}{2}$	12		"	$\frac{1}{2}$	$1\frac{1}{2}$	6		480	
$\frac{1}{512}$	1	8	8		"	1	4	4		320	
$\frac{1}{1024}$	$\frac{3}{4}$	6	6		"	$\frac{1}{4}$	$\frac{3}{4}$	3		240	
$\frac{1}{2048}$	$\frac{1}{2}$	4	4		"	$\frac{1}{8}$	$\frac{1}{2}$	2		160	
$\frac{1}{4096}$	$\frac{1}{4}$	2	2		"	$\frac{1}{16}$	$\frac{1}{4}$	1	4	80	
$\frac{1}{8192}$	$\frac{1}{8}$	1	$1\frac{1}{2}$		"	$\frac{1}{32}$	$\frac{1}{8}$	$\frac{1}{2}$	2	40	
			$\frac{1}{2}$	1	"			1	1	20	

Having thus shown how happily the principal pieces of Indian money would have fitted in with all the denominations of Greek money of the Attic scale, it now remains only to establish the fact, which I have hitherto assumed, that the Hindus were in actual possession of a real coinage at the time of Alexander's expedition. Wilson thought it "likely that the currency of the country consisted chiefly, if not exclusively, of lumps of gold and silver, not bearing any impression, until the Hindus had learned the usefulness of money from their Bactrian neighbours, and from their commerce, especially with Rome."¹⁸ He then adds, "at the same time it seems likely that they had a sort of a stamped coin even before the Greek invasion." He is led to this conclusion chiefly by the fact "that the different tables, which are given in their law books, of the several values of gold and silver refer to weight, not to number." But this argument is of little value; for we know that the money of every country refers to weight.

¹⁸ *Ariana Antiqua*, p. 404.

Was not the Roman *as* a pound of brass?—and what was the Greek *drachma* or the Hebrew *shekel*?—and when the Roman soldier received his *stipendium*, and when he expended it, did he *weigh* the pieces or *count* them? And yet do not all the Latin expressions regarding monetary transactions, such as *impendium*, *pretium pendere*, &c., refer directly to weight?

Wilson was perhaps influenced by James Prinsep's early opinion that the Hindus derived their knowledge of coinage from the Bactrian Greeks.¹⁹ But this was his first hasty deduction put forth in 1832, before he had seen any really ancient Hindu coins: for, three years later, with Stacy's rich collection before him, he no longer "contended that the Hindus had no indigenous currency of the precious metals. On the contrary, he thought that evidence would be found, in the coins he was about to describe, *that they circulated small pieces of a given weight, that stamps were given to them varying under different circumstances, and that many of these earliest tokens exhibit several stamps consecutively impressed on the same piece, until at last the superposed impressions, not those of a die but rather of a punch, came to resemble the devices seen on the Indo-Scythian coins, in company with which they have been found buried in various places,*" as at Behat. But he still ventured to uphold that from the time the Greeks entered India "may be assumed the adoption of a *die-device*, or of coined money properly so called, by the Hindus."²⁰ This view he propounds still more distinctly a few pages further on.²¹ "It is an indisputable axiom that unstamped fragments of

¹⁹ Bengal Asiatic Society's Journal, i. 394.

²⁰ *Ibid.*, iv. 621.

²¹ *Ibid.*, iv. 626.

silver and gold, of a fixed weight, must have preceded the use of regular coin." He therefore assigned the highest grade of antiquity in Indian numismatology to those small flattened bits of silver or other metal, which are found all over the country, "either quite smooth, or bearing only a few punch marks on one or both sides, and generally having a corner cut off, as may be conjectured, for the adjustment of their weight."

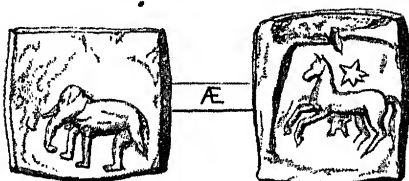
In this last passage Prinsep describes the numerous silver pieces, appropriately named *punch-marked* by himself, which are found all over India from Kashmir to Cape Kumâri, and from Sistân and Kabul to the mouths of the Ganges. But he omits all mention of the thick copper coins of Taxila and Kabul, with an elephant on one side and a lion on the other, which formed the prototype of the coinage of the Indo-Grecian kings Pantaleon and Agathokles. These are true coins, impressed with a single die on each side.²² It is true that the reverse die is frequently smaller than the blank upon which it was struck, yet this was also the case with all the famous old tetradrachms of Athens, and the well-known didrachms of Corinth, and it may still be seen on the money of Philip the father of Alexander. But there are numerous other coins found at Taxila, and more rarely at Kabul, which are struck upon one side only, from which I infer that they are older than those with types on both faces.²³

But if the Hindus derived their knowledge of die coinage from the Greeks, as argued by Prinsep and Wilson, I would ask "which are the first specimens of their die-struck money?" They cannot be the square copper

²² See *Ariana Antiqua*, Pl. xv., figs. 26 and 27.

²³ For three specimens see *Ariana Antiqua*, Pl. xv., figs. 28, 29, and 30; but I possess many others of different types.

coins of Taxila stamped with the elephant and lion, because these rude pieces of about 180 grains, and with one or more corners cut off, are quite foreign, both in their shape and in their standard, to any known Greek coins. The types also are native, and the elephants are more like the real animal than any of the representations on the coins of the Greek kings of Syria. But there is one variety of these coins, which instead of the lion has a galloping horse on the reverse, a type which was most probably imitated from the copper coins of Euthydemus. Indeed, a single specimen of this type in the British Museum has a Greek monogram under the horse, and consequently this particular coin must have been struck some time after the Greeks had established themselves in Kabul.



My conclusion is that when the Greek dominion was first established by Pantaleon in 246 B.C., the square copper coins bearing the elephant and lion formed the native currency of Taxila and Kabul, which were immediately imitated by Pantaleon and Agathokles. Some time afterwards, or about 200 B.C., the people of Taxila may have copied the galloping horse from the round copper coins of Euthydemus, to which, in the unique specimen here represented, they added the Greek monogram for Taxila itself. Admitting that these coins are contemporary with Euthydemus, I contend that those previously mentioned with the types of the elephant and lion must have been

in use when Pantaleon established the Greek dominion in the Kabul valley, and that the earlier coins, which are struck upon one face only, were most probably the current money at the time of Alexander's invasion.

That the punch-marked coins existed before the time of Alexander seems to me quite certain, for they could not have been imitated from any other known coins. In the early Greek money we have only the *youth* of coinage; but in these punch-marked pieces of India, we see money in its most immature state, in the very *infancy* of the numismatic art. But the point is placed beyond all dispute by the discovery, about 1853, of a number of silver coins in the Kangra district, comprising specimens of Antimachus II., Philoxenes, Lysias, Antialkidas, and Menander, together with a few punch-marked pieces, the last being *much worn*, whilst all the Greek coins were comparatively *fresh*.²⁴

Let us now examine such coins as we know must have followed the close of the Greek rule in North-west India and Kabul. The first are those of the Indo-Scythians, on which we find the letters, the language, and the mythology of Greece distinctly preserved, even when the king proclaims his devoted adherence to Buddhism by the title of "defender of the true Dharma." Contemporary with the Indo-Scythians were the Satraps of Saurashtra, whose silver coins of the Attic standard bear on the obverse a head, surrounded by barbarous Greek letters. These Satrap coins are undoubted imitations of the Greek money; but they are widely different from the punch-marked silver coins of the indigenous currency.

²⁴ I owe this information to Mr. E. C. Bayley, a highly experienced Numismatist, who was Deputy Commissioner of the Kangra District where the coins were discovered.

Following the Indo-Scythians came the powerful Gupta kings of Northern India. Their earliest gold coins are imitations of the gold money of their predecessors the Indo-Scythians, and their silver coins are imitations of Satrap money of Saurashtra, as the Indo-Scythians had no currency in that metal.

But the Hindus would appear to have struck coins towards the latter end of the Greek rule; for a recent find of 32 silver coins in a field at Jwāla Mukhi, near Kangra, consisted of 27 Philopator hemidrachms of Apollodotus in good condition, with 3 bilingual coins of *Amagha-bhuti*, 1 of *Dhara Ghosha*, and 1 of *Vamika Rudra Vama*. The types of the last are a bull and an elephant, like those of the well-known square hemidrachms of Apollodotus, excepting only that the elephant on the Indian coin has his trunk raised. These 5 Indian coins are also undoubted imitations of hemidrachms of the Attic standard.

From all the evidence which I have brought forward, it appears to me quite clear that the punch-marked silver coins of India were anterior to the expedition of Alexander. We might therefore reasonably expect to find some allusion to Indian money in the records of the Macedonian conquest of the Panjāb. This proof I can now produce in a passage of Quintus Curtius describing the reception of Alexander by Amphis, Raja of Taxila. On this occasion he presented golden crowns to Alexander and all his friends, in addition to 80 talents of "*coined silver*."²⁵ The words used by Curtius are *signati argenti*, which cannot possibly bear any other meaning than that of actual coin, as *signatus* was the special term used by the Romans to denote *coined* money.

²⁵ Vita Alexandri, viii. 13—41. "Præter hæc signati argenti LXXX talenta dono dedit."

To this evidence I may add a passage of Arrian, describing the gifts presented to Alexander by the subjects of Sambus, when they opened the gates of Sindomana to the conqueror.²⁶ These consisted of elephants and χρῆματα ἀπηριθμησαν, the latter being generally considered as coined money. The word χρῆματα was certainly in common use for money, whatever may have been intended by the qualifying term ἀπηριθμησαν. Mr. Thomas has pointed out that the usual translation of *numeratā pecuniā* has been objected to, and that one writer proposed to read ἀναριθμητα.²⁷ I believe that all the objectors have been under the impression that the Hindus did not possess a coinage in the time of Alexander, which naturally suggested an attempt to explain away the true meaning of χρῆματα. As for ἀπηριθμησαν I certainly look upon it as equivalent to the Latin *numeratā*, which was commonly used for ready cash—and I conclude therefore that the presents consisted of actual coin, and not of bullion or crude metal.

But a still further confirmation of the same fact may be derived from one of the common ancient names for the silver *kārsha*, which is used by Manu himself and throughout the Buddhist *Sutras*. This name is *Purāṇa*, which means simply the “old.” Now I would ask under what possible circumstances could the Indian silver *kārsha* have been called “old” at the time of the compilation of the Buddhist *Sutras*, about 200 B.C.? I do not hesitate to reply that they must have received this name shortly after the expedition of Alexander, when they were first brought into contact with the Greek money of Alexander's successors. From the common use of the

²⁶ Anabasis, vi. 16.

²⁷ Prinsep's Essays, i. 223.

word *dramya* in after times, I infer that the punch-marked silver coins must have been called *purāna dramya* or "old drachms," in contradistinction to the new drachms of the Greek standard, when they were first introduced by the successors of Alexander. To the same period I would attribute the appellation of *shad-vodrika dramya*, or "drachm of six vodris," which is found in an inscription so late as A.D. 1216.²⁸ This distinction must certainly have been handed down from an early period, when there were two *dramyas*, or drachms, of different values in currency at the same time. The punch-marked silver coin must then have been the *purāna dramya*, or "old" drachm of 4 *vodris* or oboli, while the "new" Greek drachm was the *shad-vodrika*, or *shad-boddika*, *dramya*, or drachm of 6 *vodris* or obols. If the Hindus had learned the art of coinage from the Greeks, they would never have possessed any other *dramya* but that of 6 *vodris*.

In favour of the existence of an indigenous Indian coinage prior to the time of Alexander, I would remark that if the Hindus had derived their knowledge of coinage from the Greeks, the types, shape, and standard of all their money would have been Greek. But instead of this expected imitation we find that the early copper coins of Taxila differ from the Greek money in every single point. They are square in form, different in standard, and indigenous in type. They are besides utterly without inscriptions; and this difference appears to me to offer a really crucial test of the asserted imitation. For I contend that if the Hindus had copied the square copper coins of Pantaleon and Agathokles, they would certainly have adopted inscriptions, as they actually did in after

²⁸ Bengal Asiatic Society's Journal, 1850, p. 455.

times, as we know from the Satrap coins of Saurashtra, and from the still earlier coins of Amægha-bhuti, Dhara Ghosha, and Vāmaka. I therefore look upon the numerous copper coins of Taxila, a province in immediate contact with Kabul, as a purely indigenous currency.

James Prinsep was led to doubt the early existence of Indian money by a statement of the rather credulous chronicler Pausanias, who says, "Indeed even at present, (A.D. 160 to 180), those that sail to India report that Indian equivalents are given for the Grecian commodities which are carried thither, but that the inhabitants are *unacquainted with money*, though their country abounds with gold and brass."²⁹ Now this assertion is directly contradicted by his contemporary Arrian, the author of the Erythræan Periplus, who says that the Roman gold was exchanged with advantage against the native gold coin called *kaltis*.³⁰ But the story told by Pliny of the freedman of Annius Plocamus, who was shipwrecked on the coast of Ceylon, about A.D. 50, is a still earlier confutation of the silly gossip preserved by Pausanias. The King of Ceylon, he says, admired and approved some Roman denarii, because they were all of the same weight, although evidently coined at different times, from the various heads that were upon them.³¹ But this very observation shows that he had been accustomed to the use of other coins which were not of uniform weight.

I have not thought it necessary to do more than allude to the numerous passages in the Buddhist *Sutras* and chronicles which refer to actual money, because Mr. Thomas has brought these so prominently to notice in his

²⁹ Lakonia, iii. 2.

³⁰ Νομισμα τε χρυσοῦ, ὃ λεγόμενος Καλτις.

³¹ Plinii, Nat. Hist., lib. vi. c. 22.

very full and valuable disquisition on "Ancient Indian Weights and Coins," that they are now easily accessible; and I am glad to be able to refer the reader to that Essay, in which he has so successfully upheld the independent origin of the ancient Indian coinage, which I have always advocated.

It now only remains to notice the relative values of the three metals, gold, silver, and copper, of which these coins are made. In the time of Alexander the price of gold was ten times that of silver; and the gold *stater*, or *didrachmon*, was equal to 20 silver drachmas. In India, where gold was found in considerable quantities, while silver was comparatively scarce, the price of gold was only eight times that of silver under the native rule. This is shown by the valuation of the gold *suvarna* of 140 grains at 25 silver *kdrshas* of 44·8 grains pure metal; as $44\cdot8 \times 25 = 1120$ grains, which, divided by 140, gives 8 rates exactly. In treating of the relative values of the Greek and Indian money, I have assumed that the silver coins of Alexander were quite pure. This is not exactly the case; as the result of several assays shows that they contain only $96\frac{1}{2}$ per cent. of silver, and $3\frac{1}{2}$ per cent. of alloy. But as gold has been found in these coins to the extent of $\frac{1}{4}$, or one-quarter of a grain,³² it seems to me almost certain that the silver money of Alexander was as pure as the scientific skill of his workmen could make it, that is always supposing the presence of the gold to have been unknown. If, however, the presence of the gold was known, the value of $\frac{1}{4}$ grain would be $2\frac{1}{2}$ grains of silver, which would partly cover the deficiency in value of the alloy. But I fully believe that the presence of the gold

³² Hussey, Essay on the Ancient Weights and Money, p. 71.

was quite unknown, and that the silver was honestly esteemed to be quite pure.

The coins of the Greek kings of Bactria appear to follow the same standard; but with the use of the Ariano-Pali alphabet, the silver coins of the Greek kings of Kabul and India become somewhat heavier, 16 good didrachmas of 7 different kings averaging 146·6 grains, and numerous hemidrachmas of 17 kings averaging 36·35 grains. The full weight of the hemidrachma was therefore not less than 36·5, or perhaps 37, grains. But this was not all pure silver, as I found that 70 hemidrachmas of Apollodotus and Menander, assayed at five different times, gave an average weight of 35·58 grains in weight, but only 32·78 grains of silver. Assuming the full weight of the hemidrachma at from 36·5 to 37 grains, the amount of pure silver in each coin, at the above rate, would have been from 33·6 to 34 grains, which agrees with the Attic standard of 33·6 grains for the hemidrachma, and 67·2 grains for the drachma, which I have adopted in this disquisition. I have recently melted 106 hemidrachmas, from the Sonpat find, of Heliokles, Straton, Antimachus II., Antialkidas, Apollodotus, and Hermæus, besides 475 hemidrachmas of Menander, which gave almost the same result as the previous assays. The actual value of the later coins was therefore the same as that of the earlier ones, the alloy having no doubt been purposely added, as in our modern European coinage, for the purpose of hardening the silver. The amount of alloy was probably fixed at one-tenth, which would have increased the weight of the hemidrachma from 33·6 grains of pure silver to 36·96 grains of hardened silver, which agrees with the full weights of 37 grains of the best preserved specimens.

After the Greek occupation, the relative values of gold

and silver in North-west India must have changed from 8 to 10 rates. This was only the natural consequence of the redistribution of the great hoards of silver money obtained by Alexander in Persia, where the rate of gold to silver was 13 to 1. The result of this change was a slight fall in the value of the silver *kārsha* of India. Before the time of Alexander it had been worth $\frac{1}{4}$ th of 44·8, or 5·6 grains of gold; but after the Greek occupation it was worth only $\frac{1}{10}$ th of its weight, or 4·48 grains of gold; and as the silver *kārsha* was only equal to two-thirds of the Greek drachma, the value of the stater in Indian money became 30 silver *kārshas*, at $1\frac{1}{2}$ *kārsha* to the drachma.

Of the price of copper in Greece the learned Böckh was "unable to find any definite statement."³³ But from the value which I have now assigned to the *lepton* of seven-tenths of a grain of silver, or 33·6 grains of copper, which is exactly half a drachma in weight, the relative proportion between silver and copper in Greece was 1 to 48. In India at the same time it was 1 to 50, the *kārsha* of 44·8 grains of silver being worth 16 *panas* of copper of 140 grains each, or $16 \times 140 = 2,240$ grains of copper were equivalent to 44·8 grains of silver, which gives exactly 50 rates. The small difference of 2 rates between 48 and 50 is caused by the difference of weight between the Indian *pana* of 140 grains, and the Greek *dichalkon* of 134·4 grains. The copper coins of the Greek kings of Bactriana adhere to the Greek standard, but those of the Greek kings of Ariana and India would seem to have been raised to the Indian standard. The following list shows this result very clearly :—

³³ Public Economy of Athens, p. 30.

1 Pantaleon	. . . . .	138·00 grains.
16 Eukratides	. . . . .	137·19 "
7 do. half coins give	. . . . .	138·28 "
8 do. quarter coins	. . . . .	140·24 "
16 Apollodotus	. . . . .	148·87 "
1 do. half coin	. . . . .	72·00 "
5 Antimachus	. . . . .	138·75 "
1 Antialkidas	. . . . .	140·00 "
3 Menander	. . . . .	141·33 "
5 Epander	. . . . .	143·60 "
13 Hermæus	. . . . .	138·34 "
<hr/>		
77 coins give	. . . . .	140·78 average.

The Greek coinage of India would thus appear to have been assimilated very early with the indigenous copper money of the country. I have already pointed out that the square copper money of Pantaleon and Agathokles of about 180 grains weight was an actual Indian coin mentioned by Manu, and equal to $1\frac{1}{4}$ pana.³⁴ To this evidence I will now add the large copper pieces of Demetrius, of which three specimens weigh respectively 364, 359 $\frac{1}{2}$, and 357 grains, giving an average of 360·16 grains, or exactly $2\frac{1}{3}$ *panas*, which is another of the coins mentioned by the Indian lawgiver Yājñavalkya as a fine.³⁵ Similarly my Horse coin of Menander, which now weighs 679 grains, must originally have weighed about 700 grains, or just 5 *panas*, a sum which is also mentioned by Yājñavalkya. The Dolphin coin of Menander, weighing 343 grains, and the Ox-head coins weighing 341, are, I think, further examples of the $2\frac{1}{3}$ *pana* pieces. The large Victory coins of 246 grains are perhaps intended for 2 *pana* pieces, named *drvipana*, of 280 grains, although it is not improbable that they were hemiobols, or pieces of 4 chalki of the Greek standard of 268·8 grains. But as this mixture of standard would have been extremely

³⁴ In fact I possess several old Indian coins of this very weight.

³⁵ English Translation of Code, ii. 297.

inconvenient, I conclude that the *chalkous*, which was the Greek copper unit, must have been raised from the Attic standard of 67·2 to 70 grains, so as to assimilate the two systems by making the Greek *chalkous* exactly equal to half an Indian *pana*.

In conclusion, I may mention that two at least of the Indian names of coins were not unknown to Western authors, as Hesychius calls the κέρσα, Ἀσιανὸν νόμισμα, and the κορσίπιον, νόμισμα παρ' Αἰγυπτίοις, τὸ κερσαῖον λεγόμενον. The first of these is evidently the Indian *kārsha*, and the second is the *kārshapa* or *kārshapana*. For παρ' Αἰγυπτίοις I would therefore propose to read παρὰ Γυπτίοις, and to refer the name to the powerful family of Gupta kings. Now the work of Hesychius is generally considered to have been abridged from the larger lexicon of Diogenianus, who flourished in the second century of the Christian era, at the very time that the Guptas were at the height of their power, under Chandra Gupta II. and Kumâra Gupta, whose rule extended to Surashtra and Bharoch, or Syrastrène and Barygaza, where their silver coins are still found.

As a means of convenient reference, I add a Table of Ancient Indian Coins, showing their relative values to each other, and their weights in English grains.

GENERAL TABLE OF ANCIENT INDIAN COINS.

GOLD.		SILVER.				COPPER.		Names.
Suvarnas.		Kārshas.	Padikas.	Mānas.	Panas.			
No.	Grains.	No.	No.	No.	Grains.	No.	Grains.	
1	140·0	25	100	200	1120·0	400		SUVARNA.
$\frac{1}{2}$	70·0	12 $\frac{1}{2}$	50	100	560·0	200		{ Silver PALA, or Sata-māna.
$\frac{1}{4}$	35·0	6 $\frac{1}{4}$	25	50	280·0	100		$\frac{1}{8}$ Daric.
$\frac{1}{8}$	28·0	5	20	40	224·0	80		Hebrew shekel.
$\frac{1}{16}$	14·0	2 $\frac{1}{2}$	10	20	112·0	40		Macedonian drachma.
		—	7 $\frac{1}{2}$	15	84·0	30		Persian siglos.
		1 $\frac{1}{4}$	6	12	67·2	24		Attic drachma.
$\frac{1}{25}$	7·0	1 $\frac{1}{4}$	5	10	56·0	20		Phenician drachma.
$\frac{1}{25}$	5·6	1	4	8	44·8	16		KĀRSHA.
$\frac{1}{40}$	3·5	—	2 $\frac{1}{2}$	5	28·0	10		
$\frac{1}{80}$	2·8	$\frac{1}{2}$	2	4	22·4	8		KONA.
$\frac{1}{160}$	1·75	—	1 $\frac{1}{4}$	2 $\frac{1}{2}$	14·0	5	700·0	Persian danake ³⁶
$\frac{1}{320}$	1·40	$\frac{1}{4}$	1	2	11·2	4	560·0	TANGKA—Attic obolus.
$\frac{1}{640}$		$\frac{1}{8}$	$\frac{1}{2}$	1	7·0	2 $\frac{1}{2}$	350·0	
$\frac{1}{1280}$					5·6	2	280·0	Hemiobolion.
$\frac{1}{2560}$					3·5	1 $\frac{1}{4}$	175·0	
$\frac{1}{400}$		$\frac{1}{16}$	$\frac{1}{4}$	$\frac{1}{2}$	2·8	1	140·0	PANA—Dichalkon.
					2·1	$\frac{3}{4}$	105·0	
					1·4	$\frac{1}{2}$	70·0	Chalkous.
					0·7	$\frac{1}{4}$	35·0	KĀKINI—Lepton.
					0·35	$\frac{1}{8}$	17·5	10 cowrees.
					0·17	$\frac{1}{16}$	8·75	5 cowrees.
					0·14	$\frac{1}{20}$	7·00	4 cowrees.

³⁶ The Persian Δανίκη is described as being somewhat heavier than the Attic. It was therefore the same coin as the Indian *Tangka*, which weighed 14 grains, although it contained only 11·2 grains of pure silver.

XIII.

SASSANIAN COINS.

(*Continued from p. 286, vol. xii.*)

I REVERT to the description of the coins of Firoz interrupted at p. 286. I have already noticed the dates of the *year of the reign*, now for the first time inserted on the public money of this King, and a simultaneous multiplication of the coinage itself is indicated, apart from the manifold extant examples, in the increased number of mints exhibited on the circulating media. For a long time a discussion was maintained as to whether the crypto-bilateral monograms, to the right of the altar on the reverse, constituted in any sense the initials of the mint city,¹ but I myself have never felt shaken in my faith that they were added to the die illustration for the purpose of marking the locality and attesting the standard accepted *in situ*, whether the mint was administered directly by government officials or collectively by town guilds.

The simple proof that these truncated initiatory letters were designed to supply the place of the full name of the locality, is manifested in the additions that were made to the original curt records as cities multiplied or the conventional Pehlvi speech was intruded upon by other dialects, which made it requisite to add to the

¹ M. de Bartholomæi *Mélanges Asiatiques* (1858), iii. pp. 149-349.

normal bilingual symbol continuative letters, that should leave no doubt about the still merely introductory pronunciation thus covered; and, as time progressed, we find when the Arabs took possession of the Sassanian mints, and their foreign speech demanded so much more obvious and comprehensive a Pehlvi definition, that the name of the given city or province was expressed in full, letter by letter. We likewise discover that, at this period, cities and groups of townships were in the habit of extending mutual "acceptances" by indorsing the original piece of a neighbouring mint with a *contremarque* or hall-mark bearing the designation of the guaranteeing community:² a proceeding which was clearly needed if we are to credit the assertion that at the time of the Arab conquest each "city" had its own independent standard.³ The difficulty of identifying many of the earlier abbreviations is readily overcome in all such cases as we can trace the consecutive development of the germ, and the true site of some of the unexpanded biliteral prototypes may often be approximately determined by their ultimate retention on the coins of the Arab governors, whose subject provincial divisions are better ascertained.⁴



² For instance, the addition of the *Merv-al-rūd* hall-mark to the *Merv* mintages is very frequent (J.R.A.S., xii. p. 294, No. 16). The attestation of the former city is found upon western coins indifferently with the Kufic جائز "current" of the conquerors (J.R.A.S., xii. p. 303, No. 31, 34, etc.).

و غیار هر شهری بنوعی دیگر بودی عبدالملک با یکٹ غیار آورد
—Tárikh-i-Guzidah, MS.

⁴ For example, Dr. Mordtmann has very perseveringly affirmed that the mint-mark باب *Babā* stands باب *Bāb*, "a door," indicating "die Pforte," or the imperial capital of مداین, Ctesiphon (Zeitschrift, vol. viii. p. 12), whereas the only Arab governors who use this mint are the lieutenants of Khorasān. His attri-

But to pretend to assign the large majority of these, so to say, symbolic letters, would be to encourage a mere delusion.

In the subjoined list of the twenty-six mints of Firoz, I have conjecturally added terminations to the opening

bution in this instance is still more eccentric, inasmuch as he quotes another mint-mark  *Mā* (Nos. 7, 8, of his list), which progresses into  *Mādā* or Madain, but which he still insists upon interpreting as "Media."

One of the arguments adduced by M. de Bartholomæi against the inference that these symbols stood for mints, and upon which he greatly relied, was that we had so few examples of the name of the capital "Madain." This is undoubtedly the fact, but the conclusion does not follow. Madain had no special machinery for coining beyond other cities: and it would be hazardous to say, in the present state of our knowledge, that many of the other mint-marks, which are more than ordinarily common, may not refer to some subordinate quarter of the metropolis itself, or some sectional group of proximate towns. Moreover, Oriental capitals were, as a rule, more given to absorb than to distribute the precious metals. But if we accept the theory of *local* mint management, the prestige or importance of the metropolitan issues is at once disposed of. On the other hand, to adopt a larger view, I am under the impression that the primary dies for the whole kingdom were cut and prepared on each new accession, under royal sanction, at head quarters, and the negative matrices supplied in soft steel in a finished form—with the exception of the date and place of mintage—to the recognized provincial and urban centres, where they might be reproduced indefinitely till mere wear and tear necessitated the execution of new forms. I do not for a moment contend that this practice was uniform and immutable, nor can I say when it was first introduced, but its existence can be readily traced in numerous instances in the anomalous forms of the legends and letters on the reverse, and the cramped space they had to be compressed into.

Some such system of supplying local mints from a recognized official source was clearly in operation during the subsequent Arab period: obviously on the *Arabico-Pehlvi* series, and less distinctly in the case of the obverses of the succeeding Kufic coinages, where a completely new reverse had to be engraved for every separate site, and presumably for every new year.

letters, and suggestively appended occasional geographical identifications, but I wish it to be understood that these are advanced in either case with all due reserve—

THE MINTS OF FÍRÓZ.

1. A.	Ad.	14. M.	Máulain.
2.	Airán.	15.	Mí.
3.	Ah.	16.	Merr.
4.	As.	17. N.	Nahavand.
5.	At.	18.	Ní.
6.	Au.	19. R or L.	Ríú.
7.	Aut (Ahwáz?)	20.	Lad.
8. B.	Babá (district of Merv).	21.	Rashť?
9.	Bísh (Baiza).	22. s.	Istakhr.
10. D.	Dárábgird.	23.	Shíz (Can- zaca).
11. I.	Yezd.	24. U.V.W.	Vah.
12. K.	Ká.	25.	Zad.
13.	Kármán.	26.	Zu.

In concluding my notice of the mintages of Fíroz, I have to advert to the contrasted types of that monarch's head-dress exhibited in figs. 10, 11, and 8, 9, Plate V. I am now disposed to attribute the innovation introduced on the latter, by the addition of wings, which form so prominent a feature of succeeding currencies—not to any topographical variation in the treatment of the coins, but to different divisions of Fíroz's reign, assigning Nos. 10 and 11 to the earlier, and Nos. 8 and 9 to the later portion of

his rule during his calamitous campaigns against the *Hiatalah* or White Huns, in which he finally lost his life.

A curious illustration of the events of the reign is also furnished by the dates on the former class of money, which, rising up to 7, appear to mark the early prosperity of his rule, while the cessation of any dates up to the 12th year is seemingly associated with the unexampled famine which so severely afflicted the land in the 7th year, and whose effects were more or less felt for seven years afterwards.⁵

The period of Hero-worship among the Sassanians seems to have passed away, when the sentiment of reconquest paled and the dynasty felt itself securely established in the recovered kingdom of Darius; hence we mark the disuse of bas-relief portraiture, which ceases with the representation of the figures of Sapor II. and Sapor III., at Ták-i-Bustán,⁶ and simultaneously unadorned mural inscriptions terminate with the epigraphs of these same monarchs at Persepolis.⁷ We have therefore again⁸ to seek for parallel illustrations of the coinage amid gems or other incidental memorials of royalty, whose rarity or intrinsic value may have secured their preservation even in the hands of the spoiler.⁹

⁵ Tabari, ii. 129.

⁶ De Sacy, 211; Ker Porter, ii. 188; Malcolm's Persia, i. 258; Flandin et Coste, i. Pls. 6, 13.

⁷ Sir William Ouseley's Travels in Persia, ii. 238, and my Sassanian Inscriptions, p. 114.

⁸ Ante, pp. 280-281, vol. xii.

⁹ After the battle of Kadesia, among the spoils of the capital was found "a carpet of cloth of gold, of 60 cubits square, with its pattern fashioned of jewels of the highest value." This was "cut up into small pieces, one of which, of the size only of the palm of a man's hand," was afterwards sold for 20,000 dirhams (dinárs?).—Price's Muhammedan History, i. 122—"On vint de tous côtés, de l'orient et de l'occident, de l'Égypte et du Yemen, à Médine, pour acheter les pierres précieuses."—Tabari, iii. 418, etc.

Prominent among these is the cup engraved with the hunting scene of Firoz, of which M de Longpérier gives the following description: "Cette coupe, comme le vase du président de Brosses, vient de Russie; elle a trente et un centimètres de diamètre, et pour la forme est absolument semblable au vase de verre coloré (en forme d'aiguière sans anses). Au fond se détache en relief la figure équestre d'un roi qui poursuit, de toute la vitesse de son cheval, divers animaux sauvages; devant lui fuient deux sangliers et leur marcassin, un axis, une antilope et un buffle. Deux autres sangliers, un axis, un buffle et une antilope gisent à terre percés de flèches. * * Le roi a le nez aquilin, l'œil très-ouvert, la barbe courte, la moustache longue et horizontale, les cheveux réunis derrière la tête en une très-petite masse, l'oreille ornée d'un pendant à double poire; sa tête est chargée d'une couronne crénelée par derrière et sur le côté, et portant un croissant sur le devant; deux ailes que surmonte un globe posé dans un croissant forment le cimier de cette coiffure * * * au côté droit du roi pendent un court poignard et un carquois rempli de flèches; à sa gauche, une épée. * * Firouz, dont la main droite est munie du *doigtier* des archers, tend un grand arc de corne." —Annales de l'Institut Archéologique (1843), xv. p. 105; and Plate li. vol. iii. Monumenti inediti (Rome, 1839-1853).

HORMAZD III., A.D. 457-459 (P).

It has been apparently determined among later writers¹⁰ to accept the attribution of the double-profile coins described below (Nos. 67, 68) to Zamasp, the immediate suc-

¹⁰ Mordtmann, p. 77; Bartholomæi, in Dorn's plates, 1-15 of xviii. M. A. de Longpérier attributed these pieces to "*Soufrai*," Essai, p. 63; and again in Rollin's Catalogue (A.D. 1864), p. 550, to Firoz and Soufrai.

cessor of Firoz; but I trust that the new evidence I am able to adduce will satisfy Numismatists that they, in effect, constituted the temporary issues of Hormazd, the younger son of Yazdegird II., under the nominal tutelage but real domination of his paternally-nominated guardian and administrator *Rám*, the son of Mihrán, whose untitled name appears in subdued prominence to the *left* of the field.¹¹ We know that Yazdegird was so anxious to secure the succession of this child, to the exclusion of his eldest son Firoz, that he appointed the latter to the distant government of Seistán, with the design of keeping him conveniently absent in anticipation of a final crisis. On the father's death we are told that Firoz, unable to make head against the Court-party, sought aid from the King

¹¹ "A la mort de Yazkert II., *ses deux fils*, en se disputant le trône l'un à l'autre, commencèrent en Perse une guerre civile au grand préjudice de l'empire (Élisée, p. 153). Ces luttes intestines durèrent deux ans. Pendant que régnaient ces troubles, 457-459, Vatché, roi des Aghouans, se révolta contre les Perses. Le précepteur de Péroz, *fils cadet* de Yazkert II., *Raham*, de la famille Méhran (Mihran), quoique les troupes de l'Iran fussent divisées en deux partis, attaqua bravement, avec une portion, le *frère aîné* de son élève, défit et dispersa son armée, captura Ormizd en personne et donna l'ordre de le faire mourir.

"A la mort de Yazkert ses deux fils allumèrent une guerre civile dans laquelle *le plus jeune*, Péroz, ayant battu l'aîné (Ormizd) resta roi." (Lazare de Pharp., p. 186.) "A la mort de Yazkert II., d'effroyables troubles bouleversèrent la Perse. Un certain *Rahat* de la famille Mihra, précepteur du *fils cadet* de Yazkert, Peroz, fonda avec une armée considérable sur le *fils aîné* du roi (Ormizd), le défit et le tua." (Moyse de Kaghank l.i., c.x.)

"Les écrivains orientaux, au contraire, le croient, à l'unanimité *frère cadet* de Peroz et le nomment *Ormizd*. Ils lui donnent le surnom de *Phersan*." (M. Patkanian, Journ. Asiatique, 1866, p. 169.)

See also Tabari, ii. 127; Nas'audi, ii. 195; Sháh Námah (Mohl), v. 84; De Sacy (quoting Mirchond), p. 342; Malcolm's Persia, i. 123.

of the Híatalah, by whose assistance he finally asserted his birthright:—an event the coins testify to in the double record of the *third* year of Hormazd's nominal reign on the one series, and the simultaneous insertion of the regnal *three* on the earliest indubitable money of Firoz.¹²

Nos. 67, 68. Pl. v. figs. 12–13. (Longpérier, Pl. ix. fig. 4; Mordtmann, viii. 22; Dorn, xviii. 1–15.)

Obv.—Full-sized profile to the left, with a crenelated crown similar to that of Yezdegird II., but an additional demi-lune fills in the centre aperture: triple pearl drop earrings, like those worn by Firoz (Pl. v. figs. 8–10). To the right, the effigy of a youth, with a crown identical with that of Yezdegird, holding the Sassanian diadem with its broad flowing ends.

Legend.—Behind the head of the chief figure ردم = ردم, *Rdm.*

Rev.—The usual device of the altar and its supporters, similar in its details to the ordinary design of Firoz's reverses.

Legend No. 12. م ت ل ت = 3. Mint م م As.

No. 13. ? ? Mint م م Ai.

The dates I am able to quote consist of the following—
اینگی م درود = 1; م ترین = 2; and the *three*, as above, in Mr. Stewart's example.

¹² Bartholomæi Collection, Pl. xiv. figs. 1, 2. Since my last paper appeared in the Numismatic Chronicle, the engraved Plates (32 in number) of the contents of M. de Bartholomæi's Sassanian Cabinet have been published by Dr. Dorn, of St. Petersburg (1873), accompanied by a limited introduction, but without any descriptive letter-press. I mention this prominently, as the fact of the historical data of this unusually ample collection having now become public property, absolves me from any reserve I pre-

MINTS OF HORMAZD III.

2. ¹³	د Ai.	14.	مأ. Má.
3.	د Ah.	15.	مف. Mí.
4.	د As.	19.	در Rín.
5.	د At.	24.	د Vah.
9.	د Bish.	26 P	د Zi P

VOLOGESES, Βάλας, Βλάσης, Ουάλες, *Valens*; in Armenian, *Vagharsch*; Arabic, بلاش. A.D. 486-490.

No. 69. Pl. vi. figs. 1, 2. (Longpérier, ix. 5.; Mordt., viii. 20; Dorn, Pl. xvi. 1-15.)

Obv.—Head of king with crenelated tiara, globe, etc. The bust is marked by the exceptional peculiarity of flames issuing from the left shoulder: an adjunct in frequent use among the Mithraic Indo-Scythians.

Legend (restored from new specimens)—

نزدود دلوکاشی

هرکدی ولکاشی

Hur Kadi Valakdshi.

Rev.—Fire-altar with the king's head in the capital of the structure, as in the coins of Varahrán V., with the star and crescent introduced by Firoz. The legend to the left *ordinarily* consists of the name of دلوکاشی *Valakdshi*. No dates whatever. To the right mint initials as subjoined—

viously felt in quoting specimens from the illustrative plates, up to that time, merely circulated with a view to the sale of the coins themselves.

¹³ The numbers refer to the more ample list of Firoz's Mints, p. 228.

MINTS OF VOLOGESES. (No dates.)

1. A.	Ad.	18. N.	Ní.
2.	Alí.	19. R or L.	Ríu.
4.	As.	20.	Lad.
6.	Au.	23. S H.	Shu or Shi?
13. K.	Karmán?	25. z.	Zad.

The close identity of the Pehlvi words *Kadi* and *Hurkadi* with the $\kappa\omega\alpha\eta\varsigma$ and $\tau\rho\kappa\omega\alpha\eta\varsigma$ of the "Kodes" Bactrian coins, which the present examples of Vologeses's money bring prominently under notice, invites an examination of the apparent connexion of the titles and a possible revision of the interpretation lately suggested for the Greek counterpart.¹⁴ The survival of these seemingly synonymous terms over some six or seven centuries points suggestively to the fixed ideas and permanence of local usage. There appears to be but little doubt that the title of *Kadi*, whatever its primary application or verbal root, was used in early Persian parlance for both "God" and "King,"¹⁵ while the prefix of *Húr*, "fire," "light," etc., associates the normal title with the less reformed phases of primitive Fire-worship. In concert with this new Sassanian adjunct of *Húr*, the accompanying

¹⁴ Num. Chron., iv. 210, and x. 158; J.R.A.S., iv. (n.s.) 517.

¹⁵ See Khodáhán's (خداهان) Mas'audí, ii. 237; خراسان خداه; p. 228, etc.; Ibn Khordádbah, Journal Asiatique, 1865, p. 40, بخارا خداه, ختلان خداه, etc.; Hamzah Isfahání خدای نامه i.s. Sháh Námah, etc., pp. 11, 16, 47, 37, etc. See also a curious (jumbled) passage, p. 37 قدسجان etc. كد "primus," Vüllers; Mohl, Sháh Námah, preface, p. 10; Fox Talbot, J.R.A.S. iii. 34.

device is marked by the innovation of the "sacred flame" ascending from the king's shoulder; a symbol held in common with some of the earlier sub-Hellenic branches of the Kodes class, where the humeral light is equally distinct,¹⁶ and whose embodiment is fitfully preserved on the provincial coinages until it appears in final community with, so to say, modern Hindi characters on the most debased types of the Indo-Sassanian currencies.¹⁷ The full legends on the Kodes coins are as follows: ΚΩΔΟΤ or ΥΡΚΩΔΟΤ on the obverse, with ΠΑΗΘΕΡ ΜΑΚΑΡΟΤ (sic) on the reverse; the purport of which, as tested by the Sassanian counterpart, may be freely rendered as "(Coin) of the King, or Fire king of the sacred great fire," alluding possibly to the celebrated Pyræum of Seistân, which was traditionally held as third in the order of veneration among the ancient Altars of the primæval faith:¹⁸—an identification which receives curious support from the designation of "Kuddeh," preserved to this day as the name of a portion of the revered site.¹⁹

KOBAD, *Kaβάδης*, Armenian KAVAT. A.D. 490-530 (?).

No. 70. Pl. vi. fig. 3. (Longpérier, x. 1, 2; Mordtmann, viii. 85; Dorn, xvii. 1-15, and xix. 16-20.)

Obv.—Head of the king, with the tiara officially recognized.

A star and a crescent are introduced, for the first time, on the field.

Legend, reading from the inside, كرات و دسم = *Kudt*.

¹⁶ *Ariana Antiqua*, ix. fig. 3; *Num. Chron.* x. 158; Prinsep's *Essays*, Pl. xiii. 11, 12.














¹⁷ *Ariana Antiqua*, xvi. 19.

¹⁸ "Un troisième temple, nommé *Kerakarkân* (var. کرکران کداگان etc., etc.) fut bâti, dans le Sedjestân, par Bahman fils d'Isfendiar, fils de Youstasf." *Mas'audi*, iv. pp. 73, 462.

¹⁹ Edward Conolly, *J.A.S. Bengal*, 1849, p. 587; *Malcolm*, i. 262.

افزودن *Afsūdān*, "to increase," whence we have *Afsūni*, "increase," "abundance," *Afsūn*, "more," "greater," and the later افزود *Afsūd*, "increase," which is the form finally adopted on the currency.²²


NEW MINTS OF KOBĀD, in addition to the earlier Mints of Firoz, numbered 1, 2, 3, 4, 5, 6, 7, 9, 10—12—14, 15, 16, 17—20—22, 23, 24, 25, which recur on his coinage.

- | | |
|---|---|
| 27.  Ach. | 34.  Ban. |
| 28.  (No. 2, Firoz) Airán. | 35.  Bu or Br. |
| 29.  Am. | 36.  Ih. |
| 30.  Ap or Af. | 37.  Iuchakar. |
| 31.  Apar. | 38.  Diwán or Dinán? |
| 32.  Arām. | 39.  Shah pūr? |
| 33.  Bastam. | |

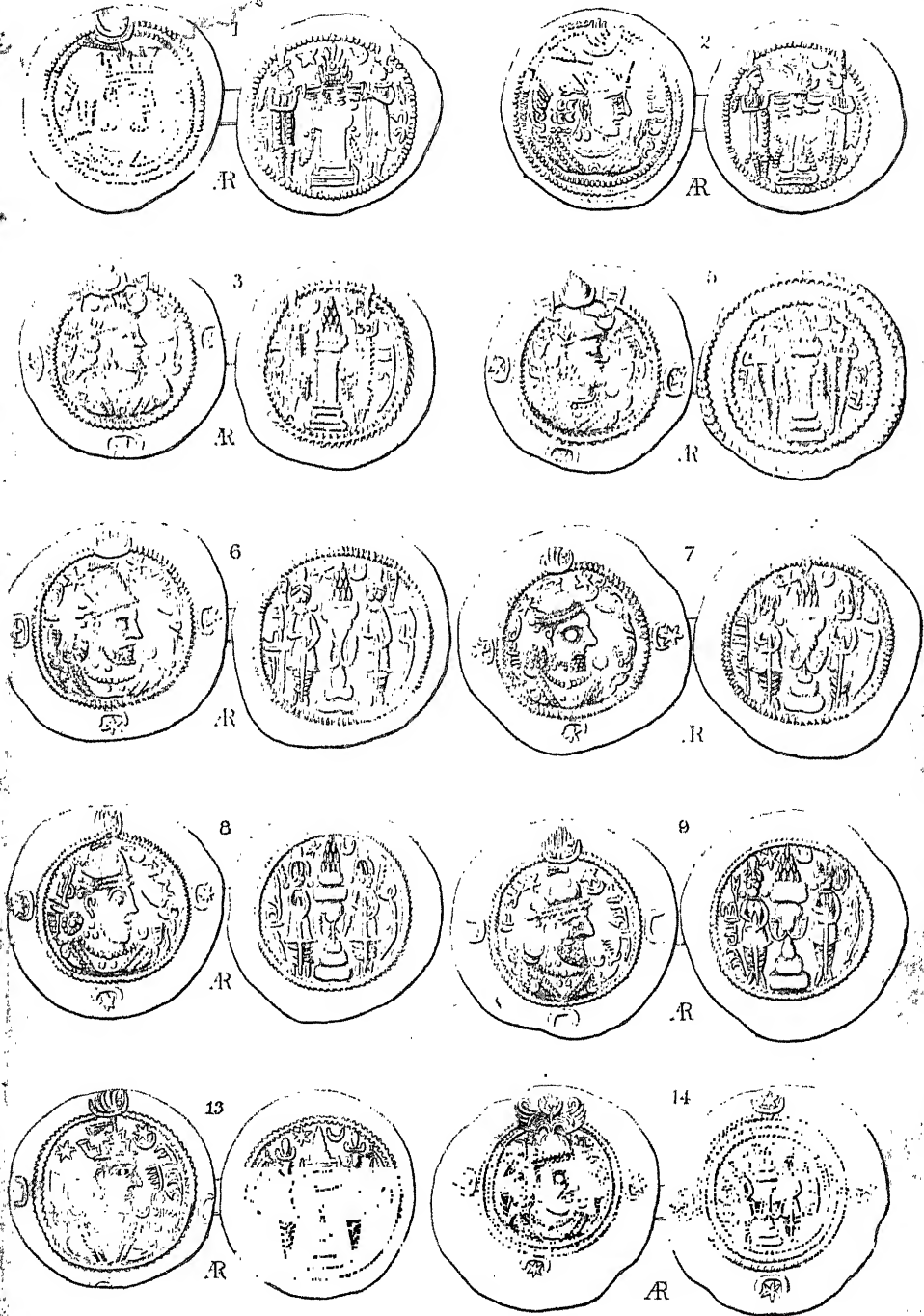
KHUSRÚ (NAUSHÍRWÁN). A.D. 530—578.

No. 72. Pl. vi. fig. 13.

Obv.—Head of king, with the conventional head-dress varying slightly in the minor details from his coins of later date (Fig. 9). Three simple crescents in the margin, with the omission of the associate stars of his predecessors.

responding with the دام ملکه (Num. Chron., p. 48), "May his kingdom endure," etc. The position of the adjunct to Kobād's name certainly favours this explanation. We have also in the mixed dialects, زود *zúd*, زياد *zād*, زان الله "May God increase." And finally there is a very curious coincidence in the use of the term  *Afsūnik*, as a title of Ormazd. (Spiegel, 359.)

²² See parallel in Arab Series—بركة *Barakat*, "a blessing," "increase," etc., from بركت = بركت "to bow, to bend the knee."



Legend.—𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥 (13), variant 𐭠𐭣𐭥𐭥𐭥𐭥𐭥𐭥 *Hushludi* and *Hushlūi* for Khusrūi, either of which terminations may be used to form the genitive.

Rev.—Fire-altar and supporters, star and crescent, etc.

Legend.—𐭠𐭣𐭥𐭥𐭥𐭥𐭥 *Trin*=2. Mint 𐭠𐭣𐭥𐭥 *Dā*, No. 10.

No. 73. Pl. vi. fig. 9.

Obv.—Varied crown.

Legend.—𐭠𐭣𐭥𐭥𐭥𐭥𐭥 *Afzūn* and 𐭠𐭣𐭥𐭥𐭥𐭥𐭥 *Hushlūi*.

Rev.—Altar, etc.

Legends.—𐭠𐭣𐭥𐭥𐭥𐭥𐭥 = 𐭠𐭣𐭥𐭥𐭥𐭥 *Duāch si*, i.e. 32.

Mint 𐭠𐭣𐭥𐭥 = 𐭠𐭣𐭥𐭥 *Lād*, No. 20.

No. 74. *Gold.* Longpérier, pl. x. 4. Ker Porter, lviii. 10.
Bartholomæi, xxiv. 45.

Obv.—Head of king to the front, full face, simple side-turreted crown with a low cap, having one half-moon on the band directly over the forehead, and the ordinary crescent with narrow Sassanian fillets surmounting the whole head-dress; close beard, with the hair of the head arranged in masses on each side, two stars above the crown, and two crescents over the shoulders, with star and crescent on the dress in front of each shoulder; necklace with three drops.

Legend.—Left, 𐭠𐭣𐭥𐭥𐭥𐭥𐭥 *Afzūn*.

Right, 𐭠𐭣𐭥𐭥𐭥𐭥𐭥 = 𐭠𐭣𐭥𐭥𐭥𐭥𐭥 *Khushludi*.

Rev.—The king standing to the front, his hands rest upon the hilt of his straight sword. Crown, etc., as on the obverse, with flowing fillets; star and crescent on each side of the head.

Legend.—Left, = هوسلودی چهارسیه
 Khúslúdí, *chahár sth.* 34th [year].

Right, Longpérier's coin = اهان یتیم کرتار
 Bartholomæi's coin = اهان یتیم کرتار

The opening *Ahán* may possibly be intended for *Atrán*, but the letters above given are clear, both in the French and the Russian engravings. The word *Ahán* is not unknown to us, though we have no clue to its meaning: it occurs in the Paikúli inscription, tablet 17, as *رہا و اهان پال* (p. 46). The second word is less definite, and varies in the two examples; *itibum* is possible²³ in the Russian coin, and *isabam*, a synonym (*یتیم*), "to dwell," might be forced in the French piece; but as I am reading only from imperfect engravings it may be as well to suspend conjectures. The final *kartár*, or optionally *kardár*, from *کردن* *kardan*, "to do," is obvious. The term occurs repeatedly in the inscriptions and on gems.

As a pendant to the novel coin device here presented, a curious parallel may be cited in the form of a highly-finished regal gem, bearing the portrait of Khusrú Naushírwán, for the description of which I am again indebted to M. de Longpérier.

"Le trésor de l'abbaye de Saint-Denis conservait, depuis les croisades ou les Carlovingiens peut-être, une coupe qui fut en 1793 déposée à la Bibliothèque nationale, et qui, composée de petits disques de verre coloré sertis d'or, passait pour avoir servi au roi Salomon. Dom Germain Millet la croyait, en 1638, 'enrichie de hyacinthes par le bord, et au dedans de grenats et d'esmeraudes très-fines, au fond d'un très-beau saphir blanc, sur lequel est entaillé, à demy relief, la figure dudit roi séant en son throsne, tel que l'Écriture sainte, le représente au III^{ème} livre des Rois, chap. 10.'" M. A. de Longpérier goes on to add, "J'ai

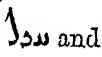

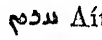



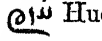

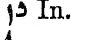

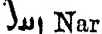
²³ Pehlvi *یتیم* is "to sit," the Aramæan *יתב*, which also means, "to dwell."

proposé de restituer au roi Cosroès I^{er} la coupe de la Bibliothèque du roi, me fondant sur la ressemblance parfaite de la figure gravée sur le disque de cristal qui forme le fond de ce vase, avec celle que nous voyons sur la monnaie d'or unique du cabinet de M. le duc de Blacas (Essai, Pl. x. No. 4²¹).

"La monnaie est assez grossièrement gravée, tandis que le cristal est travaillé avec un grand soin; cette différence de style n'empêche cependant pas de suivre dans les moindres détails l'identité des deux types."—Annales de l'Institut Archéologique, (1843) xv., p. 100.

NEW MINTS OF KHRUSRÚ I.


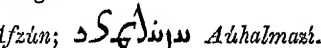
In addition to the majority of the Mints of his predecessors still to be traced on his coins.

28.  Airán.	44.  Párs.
7.  Aít or Aut?	45.  Rám.
40.  Baná.	46.  Saham.
41.  Huch.	47.  Vih.
42.  In.	48.  Varch.
43.  Nar.	



HORMAZD IV. A.D. 578-590.


No. 75. Pl. vi. figs. 7, 8. (Marsden, xxviii. 74; Longpérier, xi. 1; Dorn, xxvi. 1-15; xxvii. 16-20.)

Obv.—Head of king, with tiara imitating that of Khusrú (fig. 9). Stars and crescents in the margin as in Kobád's coinages.

Legend  Afzún;  Atahmazd.


Rev.—Fire-altar, stars and crescents, etc.


Legends,  shatá or Satá= 6. Mint  Ni.

 Mar.

²⁴ Described above, No. 74.

No. 76. Pl. vi. fig. 6. A similar coin. The name of the king is less clearly expressed.















Date  *Arbâ*=4. Mint, *Bz* or *Is*?

Marsden's coin has the date  *Khumsâ*=5.

The 12th and 13th years of the reign are the highest dates observed.



MINTS OF HORMAZD IV.

In addition to the ordinary types.

49.  Ab.	55.  Nâr.
50.  Agh. ²⁵	43.  Nâr.
51.  Bach.	56.  Nihach.
52.  Bah.	48?  Narch.
53.  Bahî.	45.  Râm.
42.  In.	46.  Saham.
54.  Sad.	57.  Sad.

BAHRÂM CHOBÎN (578 A.D.).

A very curious tale has been accepted among Oriental Bards²⁶ to the effect that Bahrâm Chobîn, the too successful general of Hormazd IV.,²⁷ in contemplating overt

²⁵ This is the very first occasion amid all the varieties of ancient Persian monuments I have examined, that I meet with anything partaking of the resemblance of a *Zend* letter of positive authenticity. The  *Gh*, the subsequent  *Ghain* of the Arabs, finds no place among the earlier Pehlvi alphabets. (See J.R.A.S., 1849, p. 21.)

²⁶ *Shâh Nâmah* (Mohl), v. p. 688; *Mas'audi*, ii. 214; *Tabari*, ii. 268; *Malcolm's Persia*, i. 154.

²⁷ "Hormuz * * * donna le commandement de l'armée à

rebellion against his king, conceived the idea of striking money in his distant camp, in the name of the heir apparent (Khusrú Parviz), and forwarding these tangible evidences of treason to Madain, with a view to sow dissension in the Imperial palace, where the innocent Prince was residing in all duty and submission. Supposing any such production of coin to have taken place, even in the exaggerated amount stated, it would have been difficult to detect the individual specimens amid the contemporaneous currencies, unless they chanced to be marked by some exceptional peculiarities of type or legend. The singular coin, of which No. 77 is no longer a unique example, goes far to determine that Bahrám, on his return march, with the plunder of Balkh and the accumulated wealth of ages²³ at his disposal, utilized the available silver in the form of crude camp-issues, whether designedly as an overt act against his sovereign, or, in the obviously subdued form here exhibited, as simply attesting the mere value and authenticity of the money, it is difficult to determine, though the former inference is clearly the most reasonable.

Bahrám-Djoubín (بهرام جوبین) *merzebán* de Rey; ce Bahrám était fils de Djoubín fils de Milád (میلاد) de la famille d'Anouch (انوش) surnommé *Er Rám*.—(المعروف بالرام). Mas'audi, ii. 213.

At p. 252 his genealogy is otherwise stated as Bahrám fils de Bahrám, fils de 'Hasis; and some very vague speculations are introduced as to the derivation and orthography of his surname. The Armenian authors call him *Vahram Mèhévandak*. See also Journ. Asiatique, 1866, p. 187; Theophylactus Simocatta, iii. 18; and note 11, p. 226, *anté*.

²³ "Bahram revint avec un riche butin et les dépouilles de Cheyabah grossies de la succession de plusieurs rois; dans le nombre étaient les trésors et les bijoux enlevés par Firásiáb a Siáwakhch, les richesses que les Turcs tenaient de leur roi Bohstásf, lors qu'il pillá le trésor de Yustásf à Balkh."—Mas'audi, ii. 213.

The unusual reproduction of a non-contemporary device, in the imitation of the obverse and reverse types of Varahrán V., however, would seem to exonerate him from the charge of seeking to disturb the king's currency by an issue for a new succession either on his own part or that of the heir apparent: and the obscure or indifferent method in which his own nominal attestation was added, certainly does not imply needless publicity or aggravation, inasmuch as modern critics may even now contest the present interpretation of what must be termed a turnover legend, that not only requires to be read backwards and upside-down, but whose conception can only be explained by supposing that the die-engraver copied within narrow limits the pattern devices placed before him, and engraved mechanically from a *written* copy the novel name of Varahrán Chobín in the positive instead of the negative form.

It is necessary to add, on the other hand, that the imitation of the types of Varahrán V.'s money may be simply due to the fact that these pieces formed the majority of the coins then current in camp, though the interval of nearly a century and a half which had elapsed from the reign of that king and the prolific issues of his successors would seem to negative any such conclusion,²⁹ were it not that we are met with another curious coincidence, in the discovery of coins (No. 77a) bearing the name and full titles of Varahrán V. associated with obverse and reverse devices closely resembling the coarse outlines of Bahram Chobín's camp currency. These coins, although less rough

²⁹ Should it perchance have happened that the bulk of the coined money, taken with the other treasures of Balkh, etc., consisted of pieces of this king, it would go far to obviate the objections above alluded to.

and unfinished than the specimens described under No. 75, would seem to have emanated from the self-same workshops. The priority of issue of the contrasted examples would also be a debatable question, as there are no means of deciding, under the identity of the names of the two Bahráms, whether Bahrá́m *Chobín* designed to claim these higher titles for himself, in his onward course of successful revolt, or merely sought to revive, as far as the artistic skill available permitted, the older currencies of his name-sake.

Far different in type and execution are the legitimate pieces (No. 78), put forth after his possessing himself of the throne; they reject all complications of the Fire-altar, and imitate with close exactitude the devices of his immediate predecessor, and are clearly the work of the ordinary officials of the State Mints.

VARAHRÁN CHOBIŌ (DURING THE REIGN OF HORMAZD IV.).

No. 77. Pl. vii. fig. 10 (five additional specimens in Colonel Guthrie's collection).³⁰

Obv.—Head slightly varied from that of Varahrán V.
(Pl. vii. 8). The execution however is much
more crude and unfinished.


Legend.—Reading from the front of the crown

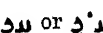

ولتان چوپ = $2 \times 100 = 200$

Valahlán Chúb. "Bahrám of the Mace."

Rev.—Device but little changed, except for the worse, from the outlines of Varahrán V.'s coins.

³⁰ It is important to note that none of these coins are from the *same* dies; each has a slightly-varying bust of the king, and an independent rendering of the legend—which is ordinarily even less definite than that on Mr. Steuart's specimen. Col. Guthrie's five coins were found at Kúlú, in the Punjáb, by Major Hay.

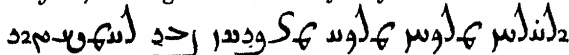
Legend.—Left,  Sín?

Right,  or  *Ai* (for Airán) or *Ani* (अने)
for *Anirán*?

No. 77 a. M. de Bartholomæi, pl. xii. no. 16, and a coin in the possession of Col. Guthrie.


Obv.—Head very similar to the outline in Pl. vii. fig. 10, but still more like the profiles on the newly-acquired coins of Bahrám Chobín in Col. Guthrie's cabinet.


Legend, reading in the ordinary way from the inside.



Valahlán Malkán Malká Mazdísan Bagí Rámshatri.

Rev.—Device as in Pl. vii. fig. 10.

Legend to the left  *Valahlán.*


„ to the right  ?

The legends are taken from M. Bartholomæi's engraving; on Col. Guthrie's coin they are seemingly identical, but less complete.

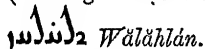
VARAHRÁN VI. (CHOBÍN) AFTER HIS ACCESSION TO THE THRONE.
A.D. 578.

No. 78. Marsden, pl. xxviii. fig. Dxxvii.; Longpérier, pl. xi. fig. 2;
Mordtmann, x. 3; Dorn, xxvii. 1–3.³¹

Obv.—Head, and most of the minor typical details similar to the devices of Hormazd IV. (Pl. vi. figs. 7, 8).

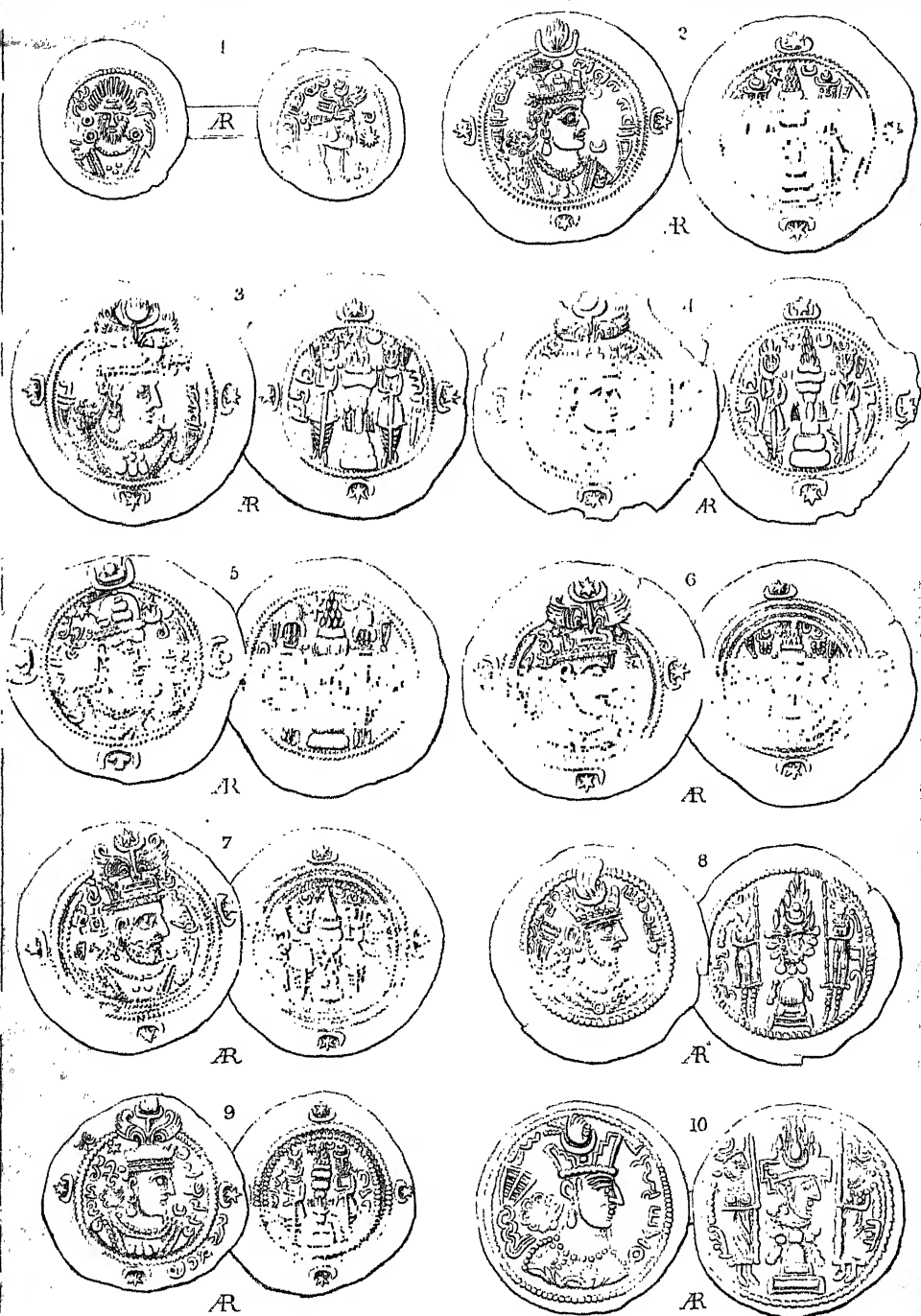
Legend.—Left,  Afzún.

Right (reading from the *outside*),

 *Wálahlán.*

Rev.—Altar and supporters almost identical with Hormazd's device.

³¹ No. 1 of M. de Bartholomæi's collection is a gold piece.



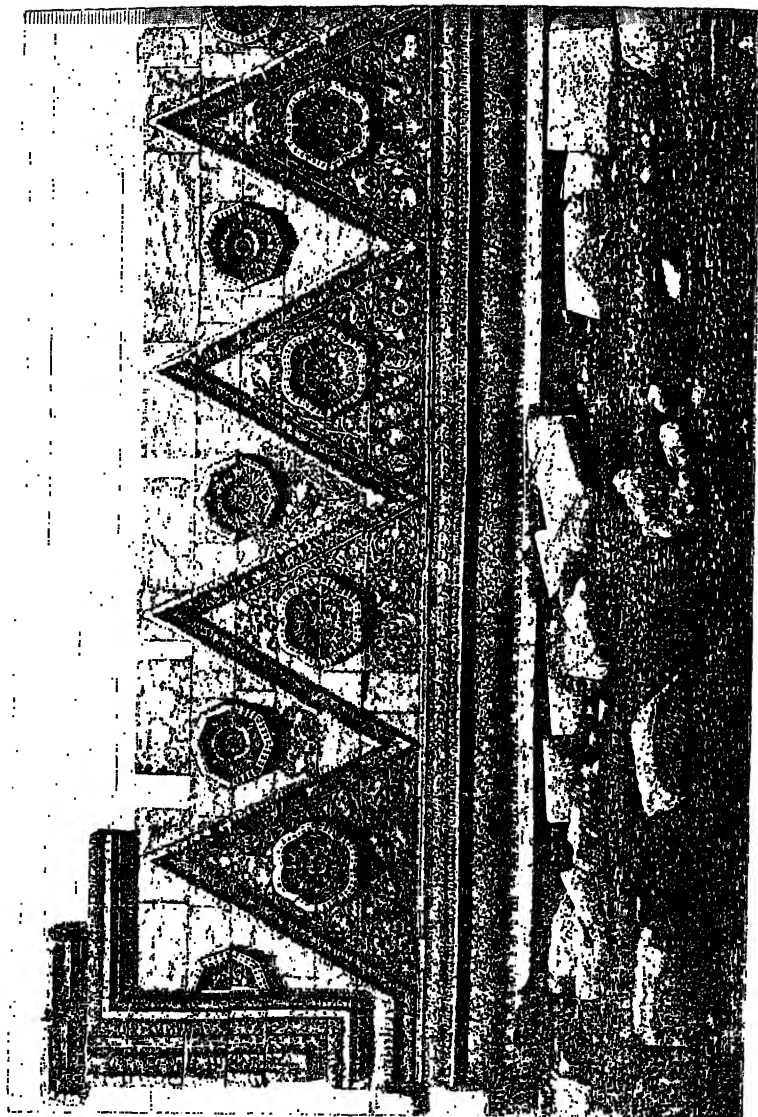
either monumental series, till Khusrú II., some two centuries later, with his awakened taste for architecture, brought Roman artists to eclipse both in size and elaboration the rock sculptures of Ták-i-Bostán, where his glories are perpetuated in supersession of the modest works of his predecessors Ardeshr Bábak and the two Sapers. There, in the deep-sunk chamber excavated in the solid rock, he is represented with his supporters, male and female, who alike seem to tender Sassanian diadems; above the arch are carved the figures of Byzantine angels; while in a lower compartment the person of the monarch himself is reproduced in all the severity of cap-à-pie in chain armour, mounted on his renowned charger *Shab-diz* ("Colour of Night").³⁴

Among the numerous edifices scattered over Persia which he erected, none will claim a higher interest among Western antiquaries than the newly-discovered Palace at Mashítá,³⁵ which marks his temporary possession of the Holy Land, and in its unfinished magnificence silently testifies to his loss of the dearly-bought conquest.

By the kindness of Mr. Murray, I am able to exhibit a wood-cut of the elaborate tracery of its ornamentation.

³⁴ "Éberwiz (Parviz), trahi par ses partisans, qui passèrent du côté de Bahram, fut mis en fuite, et son cheval Chebdar (شبداز) s'emporta. C'est ce cheval qu'on voit sculpté sur la montagne de Karmasin (Kirmánsháh), dans le district de Dinawer et la province de Máh el-Koufah; on y remarque aussi le roi Éberwiz et d'autres personnages. Cette localité et les belles figures sculptées dans le roc qu'on y admire sont une des merveilles de la terre."—Mas'audi, ii. 215.

³⁵ Dr. Tristram, "The Land of Moab." (John Murray, 1873.) The site of this palace may be roughly indicated as 30 miles due east of the head of the Dead Sea, 15 miles east of the old Roman road at Medeba, and close to the modern Pilgrim road to Mecca. I trust that future explorers will be able to secure authentic copies of the "long lines of (Pehlvi?) inscriptions," alluded to by Dr. Tristram at p. 202.



PART OF WEST-WING WALL OF EXTERNAL FACADE OF PALACE AT MASHITA.

One of the most interesting subjects of comparison between the material condition of the old world and the new is contributed by the returns of the revenues of Persia, now sunk to so low a level. For no other section of the earth's surface, at so early a date, have we such complete and definite records as Herodotus has preserved of Darius' income from his twenty satrapies.³⁶ The Arabs, again, on gaining possession of the magnificent heritage of the Sassanians, speedily took stock of the produce of the soil, accepting as the basis of their own demand the extant returns of the Empire, which were initiated under the "first" *money* assessment of Kobád, and practically developed by his successors till, in their advanced maturity under Khusrú Parviz, they furnished the standard of the State rental for many centuries afterwards. The following extracts from the works of early Muhammadan writers supply data for determining the revenue at two distinct periods, A.D. 609 and 819-820; and whatever imperfection there may be in the details, they clearly show that at the latter period the prosperity of the land had greatly declined under the baneful influence of the Nomad Conquerors, though the desolation may have been less complete in distant regions than in the home sections, where the Arab camel more directly supplanted the elaborate cultivation and careful system of irrigation followed by the indigenous husbandmen.

As the French translators are not in accord with regard to some of the data of their original Arabic authors, I reproduce their own words without comment, reserving for

³⁶ Taking the lowest estimate, £3,500,000 of our money, or the highest estimate, £3,646,000. Rawlinson's *Herodotus*, ii. 486. Mr. Kinneir estimated the income of Persia, in 1813, at something more than £3,000,000. Baillie Fraser, in 1821, placed it at £2,489,000.

some future occasion the task of reconciling differences,³⁷ and amplifying the materials, known to be largely available, from other sources. I will at present confine myself to a single authority, the "Nizhat al Kulúb," which comments with unusual knowledge and intelligence upon the varying phases of the taxation and produce of the soil under successive dynasties, extending up to the reign of Gházán Khán (A.H. 694 = A.D. 1294). In this work, the leading quotation introduced for the purposes of comparison affirms that the revenue of Khusrú Parviz in his 18th year, "from which period *Islám* commenced," amounted to 400 times 1000 thousands and 20,000 *Dínárs*. As the writer professes to cite the work which bears Ibn Khordádbah's name, we may fairly assume that he was an accurate exponent of the text of his primary authority, as it was then understood, and that the 400,020,000 *Dínárs* of *red gold*, or old *Miskáls*, the Sassanian *Aurei*,³⁸ were equal, in conversion into silver money, to a sum of 13,200,660,000 Dirhams, estimated by Ibn Khordádbah at 33 to the *Dínár* (omitting the surplus fraction which he introduces).³⁹

³⁷ Dr. A. Sprenger, so long ago as 1839, contributed an elaborate paper on the transitional Persian revenues to the (London) Asiatic Journal (vol. xxx. p. 52). He fixed the return of the revenues of Khusrú Parviz (in his 18th year) at "400,000,000 *Miskáls* = 795,000,000 Dirhams, subsequently *reduced* to 600,000,000." But his estimates of relative values have to be corrected by the discoveries of our latest French commentator.

³⁸ M. de Longpérier estimates the Sassanian gold at the *Aureus*, and the silver at the Attic drachma. His early specimens of gold weigh from 136 to 138½ grains, but the Khusrú coin above described (No. 74) only reaches 77 grains (French). Ardeshr's gold coin in the British Museum weighs 131 grains, and that of Hormazd II. 111 grains Troy. Average of six gold coins in the British Museum ranging from 275 to 380 A.D. 111.23 grains.

³⁹ I quote from four different MSS., Addit. 7708-9-10, British Museum, and an *Arabic-hand* MS. of Sir H. Elliot's; the text

Abu'l Faraj KODÁMAH. Obiit. 337 A.H.

"On raconte que Kisra-Pervíz (Chosroès II.) fit établir la statistique de son royaume dans la xviii^{ème} année de son règne (609 A.D.). Il possédait alors les districts du Seouad et toutes les autres provinces que nous avons nommées, celles de l'occident exceptées.⁴⁰ De ce côté, (la ville de Hit) marquait la frontière de son empire. Les provinces occidentales dont nous avons donné

runs almost uniformly in all these copies, the only variation being the insertion of a 9 after the 20 in No. 7709.

18th year. جامع الحساب مملكة او نوشتند چهار صد بار هزار

هزار و بیست هزار دینار سنخ

In the context it is explained that the Dínár *Surkh* or "*Red Dínár*" was equal in value to $2\frac{2}{3}$ th of the ordinary dínár of account, or the debased gold coin of the Khalifs of Baghdád, then and previously current ($2\frac{2}{3}$ dínárs at $14 = 32\frac{2}{3}$ at $15 = 35$ dirhams). This is in near accord with Ibn Khordádbah's original definition of 33 dirhams cited below from M. B. de Meynard's translation.

⁴⁰ RETURN OF THE REVENUES OF THE KHALIF OF BAGHDAD IN THE YEAR 204 A.H. (819-820 A.D.) FROM KODÁMAH.

	<i>Dindrs.</i>	<i>Dirhams.</i>		<i>Dindrs.</i>	<i>Dirhams.</i>
Swád . .		100,030,000	Haremeîn .	(100,000)	1,600,000
Alhwáz . .		23,000,000	Oman . .	(300,000)	4,500,000
Fárs . .		24,000,000	* * *		200,000
Khorásán .		37,000,000	Kermán . .		1,000,000
Máh al Kúfa		6,000,000	Holwán .		700,000
Mihraján .		3,100,000	Masabadán .		1,200,000
Kumm and			Al Aighareîn		3,800,000
Kashán .		30,000,000	Azerbaiján .		4,500,000
Rai and			* * *		1,828,000
Damawand		20,080,000	Jurján . .		4,000,000
Kumis . .		1,050,000	Tekrit . .		900,000
Taberistán .		4,280,700	Mosul . .		6,300,000
Shahrizor .		2,750,000	Meiafarekin,		
Diár Rabí'a		9,635,000	etc. . .		4,200,000
* * * and			Armenia .		4,000,000
Turún .		100,000	Diár Mondir		6,000,000
Amid . .		2,000,000	Kinnisrín, etc.	(360,000)	5,400,000
Cantons on the			Jond of		
Euphrates		2,700,000	Damascus .	(1,600,000)	2,400,000
Hims . .	(2,018,000)	30,270,000	Egypt, etc. .	(2,500,000)	37,500,000
Palestine .	(2,059,000)	30,885,000	Yemen . .	(600,000)	9,000,000

The total given by the Arab author is 4,920,000 dínárs, "or at 15 dirhams per dínár, 73,800,000 dirhams." The true addition of the totals is stated by M. de Slane to be 4,382,000 dínárs.—*Journal Asiatique*, 1862, pp. 179, 180.

les noms étaient alors au pouvoir des Grecs. Les impôts recueillis par Kisra se composaient de 720,000 *Mithkâls* (dinars) en or monnayé, et 600,000,000 de dirhams en argent.⁴¹ Je crois, dit Codama, que ces pays sont encore aujourd'hui dans le même état où ils étaient (l'an de l'hégire 204); le sol en est encore fertile, et la population n'en a pas disparu."—Notice sur Codama, par M. de Slane, Journ. Asiatique, 1862, p. 180.

Abu'l Kasem 'UBAIDULLAH, bin Abdallah, BIN KHORDÁDBAH. A.H. 260.

"Kosra-Perviz (Chosroës II.), dans la dix-huitième année de son règne, tira de l'impôt foncier de son royaume 24 millions de *miskals*, ce qui fait, au poids actuel du dirham, 795 millions de dirhams. Plus tard, le revenu (total) de son royaume s'éleva au chiffre de 600 millions de *miskals*."—M. Barbier de Meynard, notice of Ibn Khordádbah, Journal Asiatique, 1865, p. 253.

The translator goes on to observe, "Le revenu de la monarchie Sassanide doit être supérieur à celui qui résulte de l'évaluation de M. de Slane [foot note ⁴¹]. Ibn Khordadbeh affirme que le *miskal* des Sassanides valait, non un dinár musulman, c'est-à-dire de 10 à 12 francs, mais bien 33 dirhams et une fraction, soit environ 21 francs 50 cent. Établissant le calcul sur cette base, on voit que Chosroës avait plus que doublé la richesse publique, puisque l'impôt s'éleva de 500 millions à près de 1300 millions de notre monnaie." [M. de Meynard estimates the ordinary Dínár at 10 francs, and the dirham at 65 to 70 centimes.]

The subjoined table of the revenues of the independent government of Khorásán under Abdallah bin Tâhir, in

⁴¹ M. de Slane recapitulates the results in the following terms: "Voici les renseignements les plus importants que nous pouvons tirer de ce document 1°. En l'an 609 de J. C. le montant des impôts payés par l'empire persan à Chosroës II. dépassait 300 millions de francs; 2°. En l'an 820 de J. C. sous le règne d'El-Mamoun, le revenu du Khalifat de l'Orient dépassait un milliard de francs."—p. 181.

A.H. 221-222 (A.D. 836-837), is of considerable interest, exhibiting in detail the income realized from some of the outlying districts to the eastward, whose very names we are at this day unable to restore from the rare extant MSS. of Ibn Khordádbah at Oxford (Bodl. *Uri*, No. 433) and Constantinople. I have preserved the transliteration of the doubtful names, given by M. de Meynard, in italics.


	<i>Dirhams.</i>		<i>Dirhams.</i>
1. Rai	10,000,000	39. <i>Bassara</i>	7,300
2. Kumis	2,170,000	40. <i>Zagharsen</i>	1,000
3. Jurján	10,170,000	41. <i>Adan and Raman</i>	12,000
4. Kermán	5,000,000	+ 13 horses.	
5. Seistán	6,776,000	42. Kábul	2,000,500
6. Tabesín	113,000	+ 2,000 sheep (= 6,000	
7. Kohistán	787,080	dirhams).	
8. Nishapár	4,108,700	43. Búst	90,000
9. Tús	740,860	44. Kísh	111,500
10. Abiwerd	700,000	45. Ním-roz	5,000
11. Serakhs	307,440	46. <i>Badekin</i> ?	6,200
12. Merv Sháh Jahán	1,147,000	47. <i>Richtán and Jawdn</i>	9,000
13. Merv-al-Rúd	420,400	48. <i>Zaubán</i>	2,220
14. Talikán	21,400	49. Akat	48,000
15. Ghurjistán	100,000	50. Khárizm, etc.	487,000
+ 2,000 sheep.		(in <i>Khárizmí</i> dirhams at $4\frac{1}{2}$ dangs).	
16. Bádghís	124,000	51. Amol	293,400
17. Hirát, etc.	1,159,000	52. Bukhára	1,189,200
18. Pushang	559,350	(<i>Táheria</i> dirhams, black coins).	
19. Tokháristán	106,000	53. Districts of Soghd	326,400
20. Gúzgán	154,000	(<i>Frakhs</i> , 800,000	
21. Khálm	12,300	coins).	
22. Khutlán, etc.	193,300	<i>Túrki</i> , townships, 46,400	
23. <i>Katrougas</i>	4,000	(in Khárizmí and	
24. <i>Termela</i>	2,000	Mus'aibi dirhams)+	
25. El-rúb and Sinján	12,600	1,187 pieces of cloth	
26. <i>Endichardn</i>	10,000	and 1,300 plaques of	
27. Bamián	15,000	copper.	
28. <i>Chermekdn</i> , etc.	606,500	54. Soghd, <i>Samarkand</i> ,	
29. Termed	47,100	with Salt mines,	
30. <i>Soghádn</i>	3,500	Kech, Ním, etc.	1,089,000
31. <i>Sa'yán</i>	4,000	(Muhammadi dirhams)	
32. <i>Khán</i>	10,000	+ 2,000 dirhams	
33. <i>Mideján</i>	2,000	Mus'aibi.	
34. <i>Ahazán</i> ?	10,000	55. Shásh and its silver mine	607,100
35. <i>Tabáb</i>	20,000	56. Khojend	100,000
36. <i>Baham</i>	20,000	(Mus'aibi dirhams.)	
37. Saghanián	48,000		


Summary by Ibn Khordádbah, "44,486,000 dirhams, 13 horses, 2000 sheep, 1012 prisoners of war, 1300 pieces of wrought copper." M. de Meynard notices extensive discrepancies in the concluding figures, which need not however detain us.

FIROZ KOBÂN (attributed to SHÍRÚIAN).


No. 81. Mordtmann, pl. ix. fig. 29; Bartholomæi, xxx. fig. 1.


Obv.—Head with crown similar to that of Khusrú II. (No. 7, Pl. vii.), but without the wings; the upper crescent is filled in with flames as in fig. 2, vii.

Legend.—Left,  فیرۆچ, Firoz.

Right,  کوات, Kúât.

Rev.—Device similar to No. 6, Pl. vii. (Coin of Ardeshr III.)

Legend.—Left,  trin. 2.


Right,  Saham.



M. de Bartholomæi's coin has the Mint of *Da* (Darabgird) and the same date.


FIROZ BASTAM. Βεστὰμ. بستم. Armenian, *Vstam*.

No. 82. Pl. vii. fig. 5. Unique.

Obv.—King's head with close beard, lank hair, with a crown not unlike the earlier types of Ardeshr III., except that its uncrenelated front, triple ear drop and necklace drop, follow the model of Ardeshr's later coin, No. 6, Pl. vii. Two stars appear level with the top of the crown, three semilunes in the field, with star and crescent on each shoulder. The marginal crescents are filled in with a triple device, in lieu of the ordinary stars.



Legend.—Left,  افزون, Afzún.

Monogram  or  ?

Right,  فیرۆچ, Firoz.

Left,  بستهم, Bastam.

Rev.—Device, altar and supporters slightly varied and less fully defined than in Ardeshr's design. No crescents on the outer margin.

Legend.—Left,  Taltá = 3. Right,  Lad.

ARDRESHĪR III. A.D. 628-629.

No. 83. Pl. vii. figs. 2, 3, 4.

Obv.—Head of king with the tiara of the period. Elaborate necklace with three drops. Stars and crescents in the margin. The contrast between the head-dress in No. 2 and those of Nos. 3 and 4 marks the final adoption of the spreading wings, which afterwards constituted a fixed and prominent portion of the device in the Arab coinages.

Legends.—*Afsun* and اوتششت درم *Autahshat.*

Rev.—Conventional fire altar of the period. Stars and crescents in the margin.

Legends.—2. Date. *Ainki* = 1 Mint *Mār.*

3. „ Trin = 2 „ *Saham.*

4. „ ditto. = 2 „ *Nah.*

The entire range of this monarch's mints is limited to the following additional examples—4. درم; 5. درم; 6. درم; 7. درم; 8. درم or درم; 9. Baiza (Marsden, DXXV.; Longpérier, xii. 1); and 10. *Írán.*

HORMAZD V. A.D. 631-2.

No. 84. Pl. vii. fig. 6.

Obv.—Conventional portrait of the later period.

Legends.—Monograms *Am* and *Afzúd.*

To the right درم, *Auhalmaxi.*

Rev.—Altar, etc.


Date 2. Mint *Nah* (No. 17).

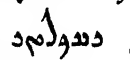

YEZDEGIRD III. A.D. 632-652.

No. 85.


B.M.


Obv.—Head of king similar in the treatment of the details to that on the coin of Ardeshr III., fig. 2, Pl. vii.


Legends.—Mon.  and *Afzud*.

Right, , *Iskarti*; ⁴² other examples give the name as , *Iskart*.

Rev.—The ordinary fire altar of the period.



Left,  = 19.





Right,  = *Buoh*.⁴³

Other dated coins are extant from the Mints of *Mär* (Merve?) and *Yezd* of the 20th year (Masson Collection, E.I. Office). On the latter are invariably to be found the marginal record of  "Bism illah," in Kufic characters, proving that the Moslims had in that year possession of the mint of the town in question, about which there were certain historical difficulties.⁴⁴

No. 86. Pl. vii. fig. 9. *Unique?*

Obv.—King's head similar to that on No. 3, Pl. vii. of Ardashir III. Marginal stars and crescents as usual, with a curious and novel device at the back of the King's crown.

Legend.—Left,  and 

Right, the King's name in unusual characters, possibly Zand, comprising  *ch*,  *m*, with varying forms of  *ch* repeated? *Chamaachch*,  شمس?

⁴² The Armenian version of the name is *Azkert*.

⁴³ See Journ. R.A.S., vol. xiii. p. 392; Sassanian Mint, No. 15, and Arab Mint, No. 1, p. 408.

⁴⁴ Journ. R.A.S., xii. p. 281.

Margin.—**𐭠𐭣𐭥𐭥𐭥** *Himlaf*, or reading very conjecturally **𐭠𐭣𐭥𐭥𐭥** for *Ormazd*? The coin in the British Museum has an **𐭠** after the **𐭥** *p*, which in many cases is used to convert the latter character into a **𐭥** *t*. **𐭠𐭣𐭥𐭥𐭥** is one of the legitimate forms of the sacred name.

Rev.—Device resembling No. 2, Pl. vii., coin of Ardashir III., with the exception of the Sassanian bands encircling the altar, which turn upwards instead of downwards.

Legend.—Left, * * **𐭠𐭣𐭥𐭥𐭥**? Right, **𐭠𐭣𐭥𐭥𐭥** = *یزي*

In conclusion, I have still to notice the curious copper piece figured as No. 1, Pl. vii., though its crude legends almost defy decipherment.

No. 87. Copper. Pl. vii. fig. 1.

Obv.—Barbarous head to the front.

Legend.—Left, **𐭠𐭣𐭥𐭥𐭥** and **𐭠𐭣𐭥𐭥𐭥**. *Am* with *Afsūd*.

Right, **𐭠𐭣𐭥𐭥𐭥**. *Yarashf* or *Darashf*?

Rev.—Assyrian Bull, with a man's head, surmounted by an Arabico-Sassanian crown. Star and the letter **𐭠** in front.

Legend.—Left, **𐭠𐭣𐭥𐭥𐭥**? *Apast-bisht*?

EDW. THOMAS.

XIV.

ON THE COINS OF THE URTUKĪS.

PROLEGOMENA.

§ 1. ON THE USE OF IMAGES ON MOHAMMADAN COINS.

THE sudden adoption of Bildmünzen or Imaged-coins by Muslims in the former half of the sixth century of the Flight forms a most interesting epoch in the history of Oriental numismatics.

So long as the coins retained the exquisite purity of calligraphic art nothing better could be desired as a national type: for this branch of art is distinctive of the East, and completely unknown elsewhere. But when the chaste Kūfī character gives way to the Naskhī, which, though most beautiful in manuscripts, is not so well represented on coins, perhaps on account of the space it requires for its full development; and when the Naskhī itself degenerates, and becomes crabbed or straggling; then the monotonous nature of the coinage wearies the student, and the sudden influx of imaged-coins forms a grateful relief.

That images of living things were forbidden by the religion of El-Islām is beyond controversy. And I think it needless to seek to excuse the image-strikers on religious grounds, as they were mostly Turkumāns, who probably



2



7



3



10



17



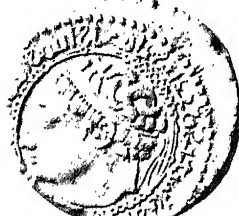
14



19



25



22



28



31



41



36



46

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COINS OF THE URTUKĪS



cared very little for the authority of the Prophet or of his representative, at least when it interfered with their own interests.

Adler's view of the reason of the adoption of imaged-money by Mohammadans seems to me satisfactory. The dynasties who made use of them were almost entirely those who came frequently into contact with European merchants. And in order that their coinage should be available in European as well as for instance in Syrian markets, they struck coins which presented at the same time images which were familiar to Europeans, and Arabic inscriptions which appealed to Muslims. They form a middle class between the purely calligraphic Arabic coins, and the purely European coins of Sarū Khān.¹

Of all the image-striking dynasties that of the Urtukīs is the most interesting: the number of imaged-coins struck by this dynasty is not approached by any other, not excepting the Benī-Zenkī. Of the images (between thirty and forty in number) found on Urtukī coins, about half are copied from Byzantine coins.

I have endeavoured as far as possible to trace the origin of the images, but it must not be supposed that I pretend to absolute exactness, of which indeed the subject does not admit.

Before I proceed to the history of the dynasty of Urtukīs, I must observe that this treatise is not intended to be a catalogue of the collection of Urtukī coins in the British Museum, but aims, though doubtless in vain, at embracing everything besides that has been published on the subject. At the same time the catalogue will show how little exists elsewhere that is not to be found in the

¹ See H. A. Grueber, *An Account of a Hoard of Coins found at Ephesus*, Num. Chron. n.s. vol. xii. p. 148 seqq.

British Museum collection. I have strictly avoided all critical discussions in the catalogue, reserving such for Notes at the end of the whole treatise.

I must add that the condition of the Urtukī coins in the Museum is very fine: in one case only (no. 46) have I thought it better to have the illustration taken from a cast of a specimen in the rich cabinet of Col. Seton Guthrie.

§ 2. HISTORY OF THE URTUKĪS.²

Among the ablest of the captains of Melik Shāh, the great Seljūkī conqueror, was a Turkumān named URTUK,

² My authorities are—

IBN-EL-ATHĪR, *Kitāb el-Kāmil fi-t-ta-rīkh*, ed. TORNBERG, vols. x., xi., xii.

ABU-L-FIDĀ, *Annales Muslemici*, ed. REISKE, T. iii., iv., v.

IBN-KHALLIKĀN, *Biographical Dictionary*, transl. by DE SLANE, articles *Ortuk* and *Āksunkēr el-Barsakī*.

ABU-L-FARAJ, *Historia Comp. Dynastiārum*, ed. and tr. ПОКОЧЕ.

IBN EL-ATHĪR, *History of the Atabek Princes*, tr. DE GUIGNES, in *Accounts and Extracts of the MSS. in the Library of the King of France*.

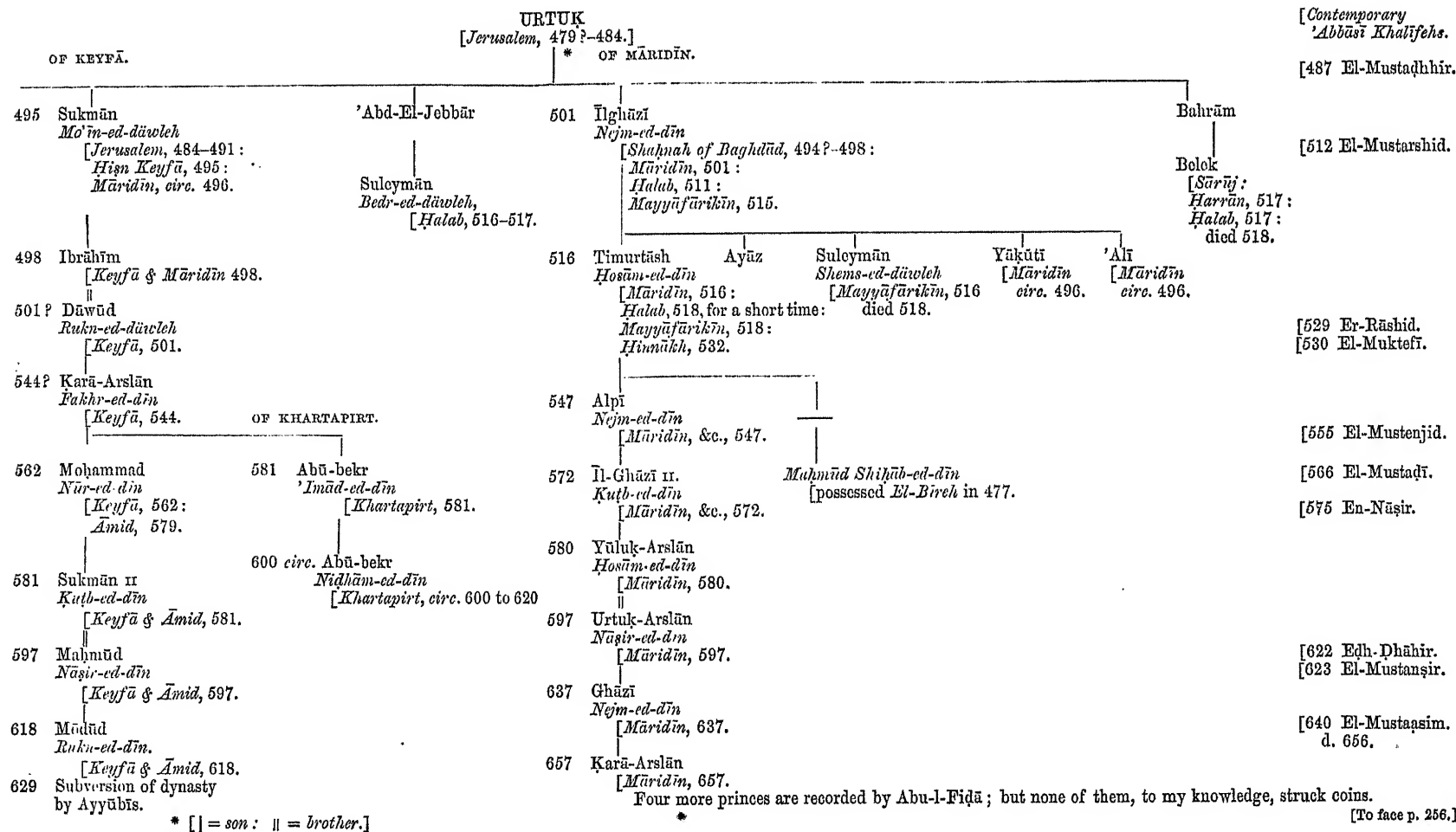
MICHAUD, *Histoire des Croisades*, T. i., pp. 300, 317 *seqq.*

Encyclopædia Britannica, eighth ed., article *Egypt*.

Coins of the Urtukīs.

I have not mentioned EL-MEKĪN amongst my authorities, for I doubt whether any dependence can be placed upon ERPENIUS's edition. The work of a man who could translate *والد أرتق* (the conj. *و* of course not existing in the MS.) *و هذا أرتق* (*المولود و الأرتقية*) should be used with caution, notwithstanding the learning of the author, which was great, considering his scant materials.

The history of this dynasty becomes necessarily somewhat involved and complicated towards the end, and I must request the reader's indulgence for any obscurity in my treatment of the subject. A frequent reference to the tabular scheme of the dynasty will, I think, remove most difficulties, and a knowledge of the coins will clear up the rest.



who had possessed himself, in the latter part of the fifth century of the Hijreh, of Hulwān and El-Jebel, two towns in 'Irāk 'Arabī, hard by the mountains of Kurdistān. He appears to have exercised considerable authority in the Seljūkī army, for when in 477 Fakhr-ed-dāwloh, on the part of Melik Shāh, besieged in Āmid Sharaf-ed-dāwleh Muslim ibn Kuroysh the 'Okeylī, Urtuk, by the persuasion of a bribe, connived at his escape. The affair, however, seems to have taken wind, for not long after this Urtuk, dreading the Sultān's vengeance, changed his quarters to Syria; a proceeding which, though wearing the look of an ignominious flight, proved to be the har-binger of a considerable upward step of his fortune: it resulted in nothing less than the government of Jerusalem, to which he was appointed by Tetesh, Sultān of Damascus, and brother of Melik Shāh, and which he retained till his death in 484 (A.D. 1091).

His sons Sukmān and Īl-Ghāzī governed Jerusalem for seven years, after which the city was taken by El-Afdal, the son of the renowned El-Jemālī, of Egypt, and soon after passed into the hands of the Crusaders. Expelled from Jerusalem, the two brothers retired into Diyār-bekr, whence they attracted the notice of the Seljūkī Sultān, who appointed Īl-Ghāzī to be his shahnah³ or agent at the court of Baghdād, some time before 495. In the year just mentioned Sukmān obtained Fort Keyfā, in reward for assistance given to Mūsā, the governor of El-Mōsil, when under siege. This incidental fact, that Sukmān was in a position to give help to the governor of El-Mōsil, and to

³ This is a Persian word. The Arabic form of it is *shihneh*. The Persian shahnah forms the relative noun *shahnagī*, to which is added the Arabic termination in *gī*, forming *shahnagīyyeh*, the office of shahnah.

force the prince of Jezîreh to raise the siege, shows that the Urtukî had acquired some dominions before he received Keyfâ.⁴ In 496 Īl-Ghāzî was ejected from the shaḥnagiyyeh of Baghdād, and recommended by Sultān Moḥammad to ask his brother for a fortress, another proof that Sukmān possessed other forts than Keyfâ. The rival Sultān, Barkiyārūk, restored Īl-Ghāzî to his office, and he remained shaḥnah till 498,—the renowned Āksunḡur El-Barsakî being then appointed to the shaḥnagiyyeh.

In 497 (1103.) the Urtukîs played an important part in the battle of Ḥarrān. The Crusaders, under Bohemond King of Antioch, Baldwin du Bourg Count of Edessa, his brother Joscelin, and Tancred of Laodicea, laid siege to Ḥarrān. The town was in a bad state for defence, and to storm it and plant on its tower the Christian banner would have been the work of a moment. But an important preliminary matter had first to be settled. The King of Antioch and the Count of Edessa each contended that his own banner should be displayed over the captured city. During the heat of the dispute the Christians were surprised by the sight of an army approaching from the east: it was the united forces of Sukmān of Keyfâ and Jekermish of El-Mōṣil, coming to the relief of the beleaguered city. Taken thus at a disadvantage, the Christians thought only of flight. After vain efforts to rally their men, Baldwin (called by the Arab writers El-Ḳummaṣ or El-Ḳūmaṣ, the *Comes*) and his brother Joscelin were taken prisoners, and Bohemond and Tancred with difficulty escaped. The Urtukî forces were seven thousand mounted Turkumāns.

⁴ Soret (*Lettre à Dr. Krehl*, Zeitschr. der D.M.G. xix. p. 545) mentions incidentally that Sukmān was lord of Sarūj 481-497. Perhaps he meant 491-497.

Sukmān had, we may presume, by this time made himself master of the fortress of Māridīn. It is related that when a war broke out between him and Ḳurbūghā, lord of El-Mōṣil, who died in 495, the latter made prisoner a certain Yākūtī, son of Īl-Ghazī, and incarcerated him in Māridīn, which at that time was attached to the dominions of El-Mōṣil. After a while, however, yielding to the entreaties of the grandmother of the young prisoner, the widow of Urtuḳ, or to a feeling of compassion for his fate, Ḳurbūghā set Yākūtī at liberty. But it seems that the Urtuḳī had conceived an affection for his prison; for, as soon as he was released, he asked permission of the governor of Māridīn to remain at the town at the foot of the hill on which the fortress was built; this town I suppose to have been Duneysir. Leave granted, he established himself there as a freebooter, and busied himself in predatory expeditions, in which he scoured the country from Ḳhallāt to Baghdād, a distance fully equal to the length of England. The amount of booty he brought back from these excursions, as well as the excitement of his pursuit, gained him much influence among the garrison of Māridīn, and the people of the surrounding district: so great a favourite did he become that a large part of the garrison were wont to accompany him on his expeditions. One day, when his influence was at its highest, he suddenly threw into chains the members of the garrison who were with him, and sent word to their families and friends at Māridīn that unless they gave up the fortress to him not one of the captives should return alive. Seeing no practicable alternative, the people threw open the gates, and Yākūtī entered Māridīn in triumph. Dying soon after, he was succeeded by his brother 'Alī: but the new governor did not long keep his possession. He went to

Jekermish of El-Mōṣil, leaving the fortress of Māridīn in the charge of a lieutenant, who, however, had by some means or other obtained information which led him to believe that 'Alī was negotiating the surrender of the fortress to Jekermish. Either from the desire that the place should not go out of the hands of the Urtukīs, or from the consideration that if the fortress was to be given up at all he might as well have a finger in it, the lieutenant of the absent 'Alī communicated his suspicions to Sukmān, who rightly deemed it the shortest way of settling the matter to take Māridīn himself, which he accordingly did. I have attributed this event to 496 or 497, because the fact that Jekermish was lord of El-Mōṣil would fix the *terminus a quo* to the end of 495 or the beginning of 496, and the *terminus ad quem* is placed at 498 by the death of Sukmān, which took place on the road to Damascus, whither he was going to assist Tughtikīn against the 'Franks.'

Here a difficulty arises. It is stated by Abu-l-Fiḍā that Sukmān was succeeded in Keyfā by his son Ibrāhīm, and that Māridīn went to his brother Īl-Ghāzī, and it is generally inferred, from this historian's account, that Īl-Ghāzī's accession to Māridīn took place immediately upon the death of his brother. But Ibn-Khallikān records that Īl-Ghāzī succeeded to Māridīn in 501, though he agrees in placing the death of Sukmān at 498. Further, Ibn-el-Athīr mentions that in 508 Īl-Ghāzī asked help of his nephew Rukn-ed-dīn Dāwūd, who was then ruling in Keyfā. We have no positive evidence that Īl-Ghāzī succeeded to Māridīn in 498; the only facts in favour of it are (1) Abu-l-Fiḍā's silence as to any lapse between the death of Sukmān and the accession of Īl-Ghāzī, and (2) by the fact, recorded by Ibn-Khallikān, that El-

Barsakī was appointed in 498 to the shah-nagiyyeh at Baghdād, the post which had been held by Īl-Ghāzī. I am, however, inclined to believe that on the death of Sukmān, his son Ibrāhīm succeeded him in Keyfā and Māridīn, and that the mention in Ibn-Khallikān of the succession of Īl-Ghāzī in 501 marks the death of Ibrāhīm—which is not recorded anywhere—and the succession of his brother Dāwūd to Keyfā, and of his uncle Īl-Ghāzī to Māridīn. This of course is merely an hypothesis, but it is one which appears to me to meet the requirements of the case. We have no right, so far as I can see, to infer from Abu-l-Fiḍā's account that Ibrāhīm ruled only in Keyfā; nor from his words—*و صارت ماردین لأخيه ایلغازی واستقرت لولده الى يومنا*—can we deduce anything more than that Māridīn went (at some time unspecified) to Īl-Ghāzī, and remained in the possession of his descendants till the time of Abu-l-Fiḍā.

Our interest is now centred in Īl-Ghāzī, the great precursor of Nūr-ed-dīn and Ṣalāḥ-ed-dīn; but one who was wanting in the chivalry which made the last a fit opponent to the noblesse of Europe. We are safe in supposing the Christian chroniclers to have built up a vast fabric of imaginary barbarity upon very scant ground. But all allowance made for the exaggerations of Crusading zeal, yet we must confess that Īl-Ghāzī was, as Michaud characterizes him, *le plus farouche des guerriers d'Islamisme*, a wild and barbarous mountain-chief.

In 508 (1114.) Sultān Moḥammad resolved to organize an exterminatory expedition against the Crusaders, which was to be conducted by the redoubtable Āksunkur El-Barsakī. This energetic chief accordingly went to all the amīrs of 'Irāk and El-Jezīreh to summon them to the war. Amongst others, Īl-Ghāzī contributed a contingent, under

his son Ayāz (or Āyāz), refusing, however, to join the expedition himself, as he did not think it consistent with his dignity to take command under El-Barsakī. The latter concealed his resentment during the activity of the expedition, but when he was on his homeward march he seized the person of Ayāz, as a penalty for his father's absence, and then proceeded to lay waste the land surrounding Māridīn. In this strait Īl-Ghāzī went to Ḥiṣn Keyfā, and obtained the assistance of his nephew Rukn-ed-dīn Dāwūd, who was ruler there. The two Urtukīs marched upon El-Barsakī, and defeated him, and released Ayāz. It was not likely, however, that the Sultān would take in good part this defeat of his favourite amīr: and Īl-Ghāzī looked about for shelter from the storm that seemed about to burst upon him. He first went to Tughtikīn, of Damascus; but he, too, was in dread of Moḥammad. The two princes then, as a last resource, leagued themselves with Tancred, the Christian King of Antioch.

Not long after this (511) the governor of Ḥalab died, and the inhabitants, fearing that the Crusaders would take advantage of the confusion which the governor's death necessarily caused, invited Īl-Ghāzī to take the command. Accordingly Īl-Ghāzī entered Ḥalab, and left his son Timurtāsh in charge of it. In two years time the dreaded event came about. The Crusaders laid siege to Ḥalab, and further, by a temporary oblivion of their boasted honour, endeavoured to get possession of the place by bribery. In their distress, the Ḥalabīs sent for help to the court at Baghdād, but in vain. At this crisis the actual sovereign of Ḥalab, Īl-Ghāzī,—to whom, strangely enough, no appeal seems to have been made by his subjects,—left Māridīn and marched to the relief of the besieged town, along with his allies, at the head of an

army of 3000 horse and 9000 foot. When the Crusaders heard of the strength of the Muslim forces they hastily beat a retreat to a strong position on a hill called 'Ifrīn, the approach to which was so difficult that they felt secure from any likelihood of the enemy following them. But they reckoned without their host. Used to the mountains of Diyār-bekr, Īl-Ghāzī was not the man to be baffled by a strong position; and with the united assent of his allied chiefs he led his men up the hill. They ascended on three sides, and the foremost were upon the Crusaders before their approach was even suspected. Then, and only then, did the Christians charge as Crusaders could, and for a moment they seemed to have the advantage. But the rest of the Muslim army was soon on the spot, and after a fierce encounter, from which but few Franks escaped, victory declared herself for the Muslims. Among the slain was Roger, the Regent of Antioch during the minority of Bohemond II.

Such, in substance, is Ibn-el-Athīr's account of the battle of 'Ifrīn. It differs in many details from that of Michaud, who, relating the affair from the Christian point of view, omits all mention of the provocation given by the Crusaders in besieging Ḥalab; and, moreover, attributes their defeat to a terror-striking whirlwind of sand, which I am fain to think existed only in the vivid imaginations of those Crusaders who were lucky enough to accomplish their flight from the field of battle. A fact that tells very much against the veracity of the Christian chroniclers is that one of them, Gauthier le Chancelier, who was taken prisoner in this battle, said, when he was released, that he could not recount the tortures which he had seen practised by the Turkumāns upon their captives, *for fear that the Christians should be led by the rehearsal to imitate their*

barbarities. An impotent reason, truly! The worthy Chancellor would not seem to have formed a very high estimate of his brother Crusaders: unless, indeed, as is highly probable, the speech was merely an excuse for not inventing a tissue of lies on the supposed brutality of the Turkumān conqueror. I cannot vouch for the civilization of these Turkumāns, but the usual idea which is entertained with respect to the general mass of Muslim leaders renowned in the Crusading times is a complete misconception. The Muslim chiefs are generally represented as barbarians pure and simple, miserable contrasts to the polished chivalry of Europe. Without referring, for the confutation of this fallacy, to the noble and generous Ṣalāḥ-ed-dīn, I will take a far humbler instance of Muslim cultivation. Associated frequently with Īl-Ghāzī in his expeditions was the Arab chief Dubeys, the son of Ṣaḍāḳālī, who possessed El-Hilleh and many other towns in 'Irāk. This prince, who on the analogy of European estimate would be a bloodthirsty marauder, is eulogized, in Ibn-Khallikān's Biographical Dictionary, as 'distinguished for his munificence, generous character, and profound knowledge of belles-lettres and poetry.' Some contrast may truly be noticed between the cultivated Arab and the Crusaders, of whom most would have been at great pains to have signed their own names.

After the battle of 'Ifrīn, Baldwin, the King of Jerusalem, who had been summoned by Roger, arrived, and pursued the Muslims. Coming up with them at Dhānīth-el-bakl, he routed them completely: Michaud adds that Īl-Ghāzī and Dubeys fled from the battle.

Halab remained in peace till the year 515, when Suleymān, the son of Īl-Ghāzī, at that time twenty years of age, endeavoured to stir up rebellion against his father

among the Ḥalabīs. It would appear that Timurtāsh, who was then seventeen, had been supplanted in the government by his elder brother Suleymān. At all events Timurtāsh could scarcely have been at Ḥalab at the time, or some reference would have been made to him by Ibn-el-Athīr in recording the revolt of Suleymān. Indeed, in the same year, possibly at the very same time, Timurtāsh went on an embassy from his father to Sulṭān Maḥmūd to intercede for the Arab Prince Dubeys; one result of the embassy was that Maḥmūd presented Īl-Ghāzī with the important town of Mayyāfārikīn. But to return to Ḥalab, the incipient revolt was at once crushed, and Suleymān was handed over by his father to Tughtikīn to be kept in ward; and Suleymān ibn 'Abd-El-Jebbār ibn Urtuk was appointed in his kinsman's stead.

In the following year, 516 (1122.₃), Nejm-ed-dīn Īl-Ghāzī died; by a sudden and violent death, according to Michaud, but I find no native authority for this. He was succeeded in Mayyāfārikīn by his elder son Suleymān, and in Māridīn by Timurtāsh; their cousin, Suleymān, retaining Ḥalab.

We have now to notice another member of the family of Urtuk, who bid fair to rival Īl-Ghāzī, but for his early death: this is Belek the son of Bahrām a son of Urtuk. He first comes into notice in 497 (1103.₄), when he possessed himself of 'Āneh and El-Ḥadīthch, in place of Sarūj, which had been wrested from him by the Crusaders. He again comes forward in 515 as having made prisoner Joscelin de Courtenai, Prince of Edessa, and his brother Galeran; and imprisoned them in a fortress, called by the Crusaders Quart-pierre, by the Arabs Khartapirt, in the north confines of Diyār-bekr. No sooner is Īl-Ghāzī dead than Belek becomes the representative of the Urtukīs.

In 517 he seizes Ḥarrān; and then he expels his cousin Suleymān ibn 'Abd-El-Jebbār from Ḥalab, on the ground that he had proved himself unworthy of his trust, in that he had given up El-Athārib to the Crusaders.

All this time Joscelin and his brother were shut up in Khartapirt; and with them was Baldwin of Jerusalem, who had gallantly come to rescue them, but succeeded only in joining their captivity. However, they had not been forgotten. Fifty Armenians, in 517, took vows to release the noble prisoners. Having entered the fortress disguised as merchants, they massacred the garrison, and set free Baldwin and his companions. In the fortress they found Belek's treasures, including his wives, and other valuables. But it was clear that less than three-score men could not hold the fortress long; and the watchful Belek was already surrounding it. Joscelin was therefore despatched to seek help from Jerusalem.

After passing through the midst of the enemy, crossing the Euphrates, and journeying four hundred miles, he arrived at the Holy City; and, throwing down in the Church of the Holy Sepulchre the chain with which he had been bound in Khartapirt, he told his story. No sooner was the distress of the garrison known than Joscelin found himself at the head of an eager host, burning to rescue the King of Jerusalem and his companions. They marched to the fortress, but they saw no longer the banner of the Cross floating over its walls. The little garrison had been unable to withstand the host of Belek; and the fortress had been stormed, the gallant Armenians slaughtered, and Baldwin carried off to captivity. Seeing nothing was to be done, the Crusaders returned heavy-hearted.

After thus flashing into the pages of history for a few

years, Belek died, whilst besieging Menbej in 518. His cousin, Timurtāsh, who was with him, carried back the body to Ḥalab, and took possession of the town for a short time, soon returning to his favourite heights of Diyār-bekr. Thus left to take care of itself, when besieged not long after by the Crusaders, Ḥalab opened its gates to El-Barsakī, and never again owned the house of Urtuğ for its master.

In the same year, 518, the death of a certain Shems-ed-dāwleh Ibn-Īl-Ghāzī is recorded by Ibn-el-Athīr. I am much inclined to identify this Shems-ed-dāwleh with Suleymān, of Mayyāfārikīn, and I have done so in the table prefixed to this history.

Ḥosām-ed-dīn Timurtāsh died in 547 (1152.), after a reign of more than thirty years, Prince of Māridīn and Mayyāfārikīn. The mention of the latter town by Abu-l-Fidā, shows that Suleymān, who had succeeded to it on his father's death, must have died or been superseded by his brother. This seems to confirm my theory that Shems-ed-dāwleh was the surname of Suleymān. Timurtāsh was succeeded by his son Nejm-ed-dīn Alpī.

In 562 Kārā-Arslān of Keyfā, the son of the aforementioned Rukn-ed-dīn Dāwūd, died. The date of his accession is nowhere mentioned, but the Chron. Syr. of Abu-l-Faraj records that in 544 Nūr-ed-dīn of Ḥalab summoned Kārā-Arslān of Keyfā to his assistance.

We have nothing now to record until the year 577 (1181.), when a new and mighty influence was brought to bear upon the dynasty of Urtuğ, an influence which at once reduced these whilom powerful princes to a state of vassalage, and finally swallowed them up in the vastness of its own ramifications. I refer to Ṣalāḥ-ed-dīn and his successors. We must premise that the town El-

Bireh in Mesopotamia (not that near Aleppo) was being besieged by 'Imād-ed-dīn Zenkī in 539; but, hearing of matters which required his presence at El-Mōṣil, he abandoned the siege. The 'Franks,' to whom the town belonged, knew very well that if Zenkī returned they could not hold out against him; so, making a virtue of a necessity, they handed the place over to Nejm-ed-dīn, the son of the yet-living Timurtāsh. At the death of Nejm-ed-dīn, El-Bireh seems to have passed into the hands of his nephew Shihāb-ed-dīn Maḥmūd, who had distinguished himself, in conjunction with the great Nūr-ed-dīn of Ḥalab, in war with the Crusaders in 505. At all events Shihāb-ed-dīn possessed El-Bireh in 577, much to the discontent of his cousin, Ḳuṭb-ed-dīn Īl-Ghāzī of Māridīn, who would have preferred owning El-Bireh himself. Accordingly, in the year just named, Ḳuṭb-ed-dīn proceeded to lay siege to the town, having first obtained permission to do so from 'Izz-ed-dīn of El-Mōṣil, under whose protection Shihāb-ed-dīn imagined himself to be. Thus deserted by his patron, the besieged prince called in the aid of the world-renowned Ṣalāḥ-ed-dīn, who summarily ordered Ḳuṭb-ed-dīn back to his own territory, an order with which the Urtukī thought it advisable not to quarrel.

Although the Ayyūbīs seem always to have been hostile to the dynasty of Māridīn, they were ever on friendly terms with the Urtukīs of Keyfā. When Ṣalāḥ-ed-dīn came northwards in 578, Nūr-ed-dīn of Keyfā was quick to pay homage and to assist him in the siege of El-Mōṣil. The politic prince was rewarded by the important town of Āmid, which the Ayyūbī presented him in the following year. Nūr-ed-dīn Moḥammad lived only two years longer to enjoy his new possession. He left

two sons, of whom the elder, K̲uṭb-ed-dīn Sukmān, succeeded to the throne.

Here I must notice a small branch of the Keyfā-dynasty, hitherto completely unknown to numismatists, and one which has struck coins which have never been explained, but which have given rise to the wildest misreadings. When Nūr-ed-dīn Moḥammad died in 581, his brother 'Imād-ed-dīn, who was at the camp of Ṣalāḥ-ed-dīn, (a second time lying before El-Mōṣil,) immediately returned to Māridīn, expecting to succeed his brother, on account of the youth of the rightful heir. Disappointed in this hope, he contented himself with the fortress of *Kharta-pirt*, which I have had occasion to mention more than once already, and in it he lived till some time before 601. The date of his death is not mentioned in Ibn-el-Athīr (the only historian, I believe, who makes any mention of this branch of the Urtukīs); but this writer mentions the fact that his son Niḡhām-ed-dīn Abū-bekr was besieged unsuccessfully in 601 by Maḥmūd of Keyfū and Amid. This 'Imād-ed-dīn is none other than the 'Imād-ed-dīn Abū-bekr Ibn-Ḳarā-Arslān of the coins which have so long puzzled numismatists. *Kharta-pirt* remained in the family of 'Imād-ed-dīn till 620. Such is the scanty record of this (to numismatists) interesting little branch of the dynasty.

To return to Māridīn. The death of K̲uṭb-ed-dīn ʿIl-Ghāzī II. in 580 was accompanied by the loss of Mayyā-fārikīn, which was then taken by the Shāh Armen, and subsequently passed into the possession of Ṣalāḥ-ed-dīn.

K̲uṭb-ed-dīn was succeeded by his elder son Ḥosām-ed-dīn Yūluḡ- (or Būluḡ- or Būlūḡ-) Arslān, who appears to have been a mere fool. The real authority was in the hands of a Memlūk of K̲uṭb-ed-dīn, named Niḡhām-ed-

dīn El-Baḳash. Yūluḳ-Arslān is stated to be alive in 594, when El-'Ādil laid siege to Māridīn; but of the exact date of his death we cannot be certain. The coins prove that he must have died between 596 and 598. He was succeeded by Urtuḳ-Arslān, who was not like his brother, and had no fancy for nominal power; and therefore took the opportunity of the illness of El-Baḳash in 601 to kill him, and also his favourite Memlūk Lu-lu, who seemed likely to follow in his master's steps.

In 597, Sukmān II. of Keyfā and Āmid was killed by falling from a house-top. Having conceived a violent animosity towards his brother Maḥmūd, he had appointed a Memlūk named Ayāz to succeed him; in which, however, the chief amīrs of the country did not agree, for they invited Maḥmūd to take possession, which he accordingly did.

In 599 El-'Ādil gave orders to El-Ashraf to besiege Māridīn: but by the mediation of Eḍḥ-Ḍḥāhir Ghāzī of Ḥalab an accommodation was arrived at; Urtuḳ-Arslān agreeing to insert the name of El-'Ādil in the Khuṭbeh and Sikkeh, and to pay a fine of 150,000 dīnārs. All this is borne out by the coins. A coin of 599 (which must refer to the early part of the year) bears the name of Eḍḥ-Ḍḥāhir, as well as that of the Urtuḳī. This proves the relations which subsisted between the Prince of Māridīn and Eḍḥ-Ḍḥāhir, and which induced the latter to use his influence in favour of the Urtuḳī when besieged by El-Ashraf. Further, another coin of 599, (which must have been struck about the middle of the year, or perhaps at the end of the first quarter,) bears the name of El-'Ādil, thus fulfilling a part, at least, of the conditions of the peace.

The friendly relations which had always been kept up

between the Urtukīs of Keyfā and Āmid and the Ayyūbīs were now destined to come to a violent end. Maḥmūd had died in 619, and his son Mōdūd, who succeeded, was of the most infamous character. Whether the Ayyūbīs took this as a pretext or not I cannot say; but in 629 (1231.₂) El-Kāmil marched upon Āmid and took it, together with its dependencies, which had been minished by the inroads of the Sultān of Rūm. Mōdūd was imprisoned until the death of El-Kāmil (635), when he escaped, and took refuge with El-Muḍhaffar of Ḥamāh, and eventually died by the hands of the invading Tatars.

Māridīn has long ceased to afford us any interest, notwithstanding its brilliant beginning, and we must conclude the history of its nothingness by a table of the princes succeeding Urtuk-Arslān down to Abu-l-Fiḍā's time, beyond which I have neither the materials nor the inclination to follow them.

- | | |
|-------------------------------|--|
| 637 | Es-Sa'id Nejm-ed-dīn Ghāzī. |
| <i>circ.</i> 657 ⁵ | El-Muḍhaffar Karā-Arslān. |
| <i>circ.</i> 691 | Shems-ed-dīn Dāwūd. |
| <i>circ.</i> 693 | El-Manṣūr Nejm-ed-dīn Ghāzī. |
| 712 | El-'Ādil 'Imād-ed-dīn 'Alī Alpī; reigned 13 days. |
| 712 | Eṣ-Ṣāliḥ Shems-ed-dīn Ṣāliḥ. |
| | He was reigning in 715 (A.D. 1315. ₀). |

§ 3. ON THE COINAGE OF THE URTUKĪS.

In a very able article in the *Numismatische Zeitschrift* (vol. i., Wien, 1869,) Dr. Karabacek has expounded the theory that the large copper coins of the Urtukīs, Benī-Zenkī, etc., were all originally *silvered*, and passed current

⁵ Coins bearing Es-Sa'id's name have the dates 654, 655, 656, 657; I have therefore differed from the date of the Takwīm Hall Maridīn, as given by Abu-l-Fiḍā, which is '*circ.* 653.'

as *dirhems*: that the poverty of silver of those dynasties compelled them to use copper and to cover it with a coating of silver. This is a bold theory, yet there is much in favour of it; though I doubt whether at present we have quite sufficient materials wherewith to set this important question finally at rest. Dr. Karabacek advances several weighty reasons in support of the theory. In the first place there is the undoubted fact of the existence of Urtukī and other coins with a coating of silver. The British Museum possesses several of these, and several are exhibited by Dr. Karabacek's collection. This alone is of immense weight in deciding the question. Secondly, there is the occurrence of the name *dirhem* upon some of these copper coins. Thirdly, the respect due to the currency is inculcated by the curse *هذا الدرهم ملعون من يغيره*, *Cursed be he who discredits (or dishonours) this dirhem*: a curse of which Dr. Karabacek takes the obvious grammatical rendering instead of the unintelligible conjecture of Fraehn. Dr. Karabacek's translation—"Verflucht sei, wer diesem Dirhem einen Schimpf anthut"; d. h. wer ihn tadelt oder (im öffentlichen Credit) herabwürdigt"—undoubtedly favours the theory. It is true that the form of the word would equally bear a different pointing:—*هذا الدرهم ملعون* *Cursed be he who alters this dirhem!*—sc. by taking off the silver, etc.; but this reading (which has, I believe, never yet been suggested) is, in my opinion, far inferior to Dr. Karabacek's, which is thoroughly to the point. Dr. Karabacek also adduces historical testimony to the use of silvered money by the 'Abbāsī Khalīfahs.

There are, however, one or two points which I find at present some difficulty in getting over, and which I hope the propounder of the theory will take into his consideration, if he has not done so already. In the first place, if

these copper coins were intended to pass as dirhems (of which I have scarcely any doubt), why were they struck of such a large size? Very frequently they are more than double the diameter of contemporary silver dirhems of other dynasties. If intended for dirhems, why not of the usual size? Again, among the *silvered* copper coins of this and contemporary dynasties that I have seen, in all about a dozen, how is it that not one is in an intermediate state? Of this class of coin—large copper—I have seen only those which are entirely copper, without a trace of silver, (and these form the great majority,) and those which are entirely silvered, only showing copper at an occasional broken chip at the edge, or on a very prominent letter, where the copper begins slightly to show through. Now this is very strange. If these coins were all silvered once, surely many would show slight traces of the silvering, or would be, say, silvered on the ground but not on the characters. Besides, those coins which are free from all trace of silvering are often those which are in the most perfect preservation, hardly rubbed at all. A coin which had been silvered would, I am certain, have a very different surface from that of many in the Urtukī collection in the British Museum. I feel, therefore, compelled to reject the theory that *all* these copper coins were once silvered. Why some were silvered and others not is a question still to be settled. I admit freely that there is ample ground for believing these coins to have passed as dirhems, and it is a fact worthy of notice that hardly any copper coins were struck by the Urtukīs after the year 625, when the Seljuḳī and Ayyūbī type of silver coin came into use among them: for it is well known that from about the year 625 of the Flight the Urtukīs struck at Māridīn silver coins exactly resembling those of the Seljuḳīs of

Rūm, and others, also, resembling those of the Ayyūbīs. It is greatly to be hoped that Dr. Karabacek may be induced to perfect his ingenious and valuable theory by a second article on the subject, elucidating the few points I have touched upon.

§ 4. NAMES, SURNAMES, AND TITLES, OF THE URTUĞĪ
PRINCES WHO STRUCK COINS.

1. NAMES.

a. Tatar.

الپی Alpī.

قرا أرسلان Karā-Arslān.

سکمان Sukmān (written with ك on the coins, but ق in the MSS.).

تمرتاش Timurtāsh.

أرتق أرسلان Urtuğ-Arslān.

يولق أرسلان Yūluğ-Arslān, or Būluğ-, or Būlūğ-Arslān.

b. Arabic.

غازی Ghāzī.

محمود Maḥmūd.

مودود Mōdūd.

محمد Moḥammad.

c. Tatar-Arabic.

ایل غازی Īl-Ghāzī.

2. SURNAMES.

a. Patronymic Surnames.

أبوبکر Abū-Bekr of Khartapirt.

أبو المظفر Nejmed-dīn Alpī of Māridīn.

b. *Honorific Surnames.*

حُسامُ الدِّينِ	<i>Sword of the Religion.</i>	M. ^o Timurtāsh : Yūluḡ-Arslān.
رُكنُ الدِّينِ	<i>Stay of the Religion.</i>	K. Mōdūd.
عِمادُ الدِّينِ	<i>Pillar of the Religion.</i>	Kh. Abū-Bekr.
فَخْرُ الدِّينِ	<i>Glory of the Religion.</i>	K. Ḳarū-Arslān.
قُطْبُ الدِّينِ	<i>Pole-star⁷ of the Religion.</i>	K. Sukmān : M. İlghāzī II.
مُحْيِي الْعَدْلِ	<i>Reviver of Equity.</i>	K. Moḥammad : Kh. Abū-Bekr.
مُعِينُ أمير المؤمنين	<i>Aider of the Prince of the Faithful.</i>	K. Ḳarū-Arslān.
مُعِينُ الإمام	<i>Aider of the Imām.</i>	K. Sukmān II.
نَاصِرُ الدُّنْيَا وَالدِّينِ	<i>Defender of the State and the Religion.</i>	K. Maḥmūd : M. Urtuḡ-Arslān.
نَاصِرُ الدِّينِ	<i>Defender of the Religion.</i>	K. Maḥmūd : M. Urtuḡ-Arslān.
نَجْمُ الدِّينِ	<i>Star of the Religion.</i>	M. Alpī.
نَصِيرُ أمير المؤمنين	<i>Defender of the Prince of the Faithful.</i>	K. Moḥammad : Kh. Abū-Bekr.
نَصِيرُ الإمام	<i>Defender of the Imām.</i>	K. Moḥammad.
نُورُ الدِّينِ	<i>Defender of the Religion.</i>	K. Moḥammad.

⁶ M=Urtuḡis of Māridin. K=Urtuḡis of Kocyā.

Kh=Urtuḡis of Khartapirt.

⁷ Or *Cynsüre*. The reader will remember Milton's use of this word :

"Towers and battlements it sees
Bosomed high in tufted trees,
Where perhaps some beauty lies,
The Cynsüre of neighbouring eyes."

L'ALLEGRO, 77.

⁸ On all coins that I have seen the form of the word precludes the possibility of its being مغِيث or معز as some would read.

3. TITLES.

شاه *Shāh.*

This title occurs only on the coins of Kutb-ed-dīn Īl-Ghāzī II. of Māridīn in the form شاه دیاربکر *Shāh of Diyar-bekr.*

ملک *King.*

In accordance with the rules of agreement in Arabic, this title always has the definitive ال when followed by an adjective, but when followed by a substantive in the relative case it is without the definitive. It is used, on the Urtuḳī coins, in connection with the following adjectives and substantives.

السَّعِيد <i>the prosperous.</i>	M. Ghāzī.
الصَّالِح <i>the righteous.</i>	K. Maḥmūd.
الْعَادِل <i>the just.</i>	K. Sukmān II.
الْعَالِمُ الْعَادِل <i>the wise, the just.</i>	K. Karā-Arslān; M. Timurtāsh; Alpī; Īl-Ghāzī II.; Urtuḳ-Arslān.
الْمُسْعِد <i>the prospered.</i>	K. Sukmān II.; Mōdūd.
الْمُظْفَر <i>the victorious.</i>	M. Karā-Arslān.
الْمَنْصُور <i>the victorious.</i>	M. Urtuḳ-Arslān.
مَلِكُ الْأَمْرَاء <i>king of princes.</i>	K. Karā-Arslān; Moḥammad; Kh. Abū-Bekr. M. Alpī; Īl-Ghāzī.
مَلِكُ دِيَارِ بَكْر <i>king of Diyar-bekr.</i>	M. Alpī; Īl-Ghāzī; Yūluḳ-Arslān; Urtuḳ-Arslān.

مَوْلَى Lord.

This title occurs, in the phrase لِمَوْلَانَا الْمَلِكِ [belonging] to our lord the king, on coins of Īl-Ghāzī II. of Māridīn.

§ 5. LIEGE-LORDS TO WHOM THE URTUKĪ PRINCES DID
HOMAGE ON THEIR COINS.

I. AYYŪBĪS.

Urtukīs as Vassals.

1. Ṣalāḥ-ed-dīn I. A.H.
 الملك الناصر صلاح الدنيا والدين M. Yūluḡ-Arslān, 581, 583,
 يوسف بن أيوب 584, 585.
 الملك الناصر يوسف بن أيوب K. Sukmān II., 581, 584.
 الملك الناصر صلاح الدين محمدي M. Yūluḡ-Arslān, 580-589.
 دولة أمير المؤمنين يوسف بن أيوب
2. El-'Ādil I.
 الملك العادل سيف الدين M. Yūluḡ-Arslān, 589;
 أبوبكر بن أيوب Urtuḡ-Arslān, 606.
 الملك العادل أبوبكر بن أيوب M. Urtuḡ-Arslān, 599, 611.
 الملك العادل أبوبكر K. Maḥmūd, 615.
3. El-Kāmil.
 الملك الكامل ناصر الدين محمد M. Urtuḡ-Arslān, 620.
 بن أيوب [630?]
 الملك الكامل محمد M. Urtuḡ-Arslān, 615, 628,
K. Maḥmūd, 618.
 الملك الكامل محمد أيوب M. Urtuḡ-Arslān, A.?
 الملك الكامل محمد بن أبي بكر؟ K. Maḥmūd, 610?
 الملك الكامل K. Maḥmūd, 617.

4. Eḏh-Dhāhir.

الملك الظاهر غازي M. Urtuḡ-Arslān, 599.

5. El-'Azīz (of Ḥalab).

الملك العزيز M. Urtuḡ-Arslān, A. ?

6. En-Nāṣir Ṣalāḥ-ed-dīn II.

[655, 656, 657.

الملك الناصر يوسف M. Nejm-ed-dīn Ghāzī, 654,

7. Eṣ-Ṣāliḥ Ayyūb.

الملك الصالح نجم الدين أيوب M. Nejm-ed-dīn Ghāzī, A. ?

8. El-Afdāl and Eḏh-Dhāhir.

الملك الأفضل علي و الملك

الظاهر غازي بن الملك الناصر

9. El-Kāmil and El-Ashraf.

الملك الكامل الملك الأشرف

موسى

II. ATABEG OF EL-MŌṢIL.

Nūr-ed-dīn Arslān Shāh.

نور الدين أتابك M. Yülük-Arslān, 596.

This name appears on the same coin as the names of El-Afdāl and Eḏh-Dhāhir, mentioned above.

III. SELJŪKĪS OF RŪM.

1. Key-Kāwus.

السلطان الغالب عز الدنيا والدين K. Maḥmūd, 614.

كیکاوس بن كيخسرو

2. Key-Kubād.

السُّلْطَانُ الْأَعْظَمُ عَلَاءُ الدِّينِ كَيْقَبَاد M. Urtuk-Arslān, 623, 633.

بْنُ كَيْخُسْرُو

السُّلْطَانُ الْأَعْظَمُ عَلَاءُ الدِّينِ كَيْقَبَاد M. Urtuk-Arslān, 623.

قَسِيمُ أَمِيرِ الْمُؤْمِنِينَ

السُّلْطَانُ الْمَعْظَمُ كَيْقَبَادُ بْنُ كَيْخُسْرُو M. Urtuk-Arslān, 625.

3. Key-Khusrū II.

السُّلْطَانُ الْمَعْظَمُ غِيَاثُ الدِّينِ كَيْخُسْرُو M. Urtuk-Arslān, 634.

IV. MOGULS OF PERSIA.

Hūlāgū.

هَوْلَاكُو الْمَعْظَمُ M. Karā-Arslān.

§ 6. URTUKĪ MINT-PLACES.

In the list of mint-places in Soret's Numismatique Musulmane, I find six attributed to the Urtukīs :

URTUKĪS OF KEYFĀ.

الْحِصْنُ *The Fortress* (sc. of Keyfā).

آمِد *Āmid*.

URTUKĪS OF MĀRIDĪN.

مَارِدِينَ *Māridīn*.

دُنَيْسِير *Dunaysir*.

[دِيَارْبَكْر *Diyār-bekr*.]

[حَمَاه *Hamāh*.]

All of these I can confirm from the British Museum, with the exception of the last two. By *Diyar-bekr* I imagine Soret to have intended that Urtukī coins were struck in the province of that name; but not that they bore the name, as they do Māridīn, professedly as a mint. The last mint, *Ḥamāh*, is given by Soret on the authority of Blau, and is queried, and with good reason; for all that Dr. Blau read of it was *ا...⁹*. If there were only one specimen of this coin in the British Museum, I should have been unable to correct Dr. Blau's reading: but as there are six examples (differing in date), I am able to correct it. A careful comparison of the six coins has placed beyond a doubt the reading *بماردين*. No one example gives it complete: and such must be the case with Dr. Blau's coin; it showed only the letters *ا...⁹*, which on a much-rubbed coin are easily mistaken for *ا...⁹*. The coins are of Nejm-ed-dīn Ghāzī, in silver, of small size. I may add that at the time of the striking of Dr. Blau's coin, 545, (the British Museum specimens range from 555 to 557,) the Ayyūbī El-Manṣūr Moḥammad (the uncle of the well-known historian, Abu-l-Fiḍā) was reigning in Ḥamāh. If by any chance the coin had been struck then, his name would have appeared on the coins.

To the above-mentioned list of mints I must add one which I find on a silver coin of Nāṣir-ed-dīn Urtuk-Arslān. The letters *بكيف* are perfectly distinct, but I am unable to make out the final alif *ل* which should complete the word *Keyfā*: it seems to be a *ك* rather than an alif. But how comes it that an Urtukī of Māridīn struck coins at Keyfā, a fortress which had always belonged to the other branch of the family? This question is by no means easily answered. We read

⁹ *Zeitsch. der deutsch. morgenl. Gesellschaft*, xi. 453, no. 24.

in the *Annales* of Abu-l-Fiḍā that in 629 the Ayyūbī El-Kāmil marched upon Āmid, and that Mōdūd, the last prince of the lineage of Sukmān surrendered it to him, together with its dependent towns and fortresses, among which was Keyfā. El-Kāmil left his son Eṣ-Ṣāliḥ in possession of Āmid: but no further mention is made of Keyfā. We should be left to conclude that it went to Eṣ-Ṣāliḥ along with Āmid, were it not for this coin, which distinctly shows that in 628, a year before the taking of Āmid, Keyfā was in the hands of the prince of Māridīn. I think it would be hazardous to suppose that Abu-l-Fiḍā was mistaken in a date which relates to his own family not long before his own birth, and therefore I believe the date, as given by him, of the taking of Āmid to be correct. The corroboratory evidence of Ibn-el-Athīr is wanting, as his history (ed. Tornberg) concludes with the year 628: however, the absence of any mention of the taking of Āmid in the final year of Ibn-el-Athīr comes to much the same thing for my purpose as if we had the account of it in the following year. The supposition that the Keyfā of this coin is a different place from the Keyfā of Sukmān and his descendants may at once be dismissed as to the last degree improbable. The opinion which I hold is that Abu-l-Fiḍā, knowing that Keyfā had always been associated with the race of Sukmān, stated that it was among the places given up to El-Kāmil only by an argument from analogy, without having any historical basis for the assertion. I hold, therefore, that Abu-l-Fiḍā, though correct in his date of the taking of Āmid, was mistaken in recording that Keyfā belonged to the prince of Āmid in 629; and I believe that it was taken by or ceded to the prince of Māridīn some time before 628.

The mint ميارفارقين (ميفرقين or Marsden) is a misreading for ملعون من. Those who have had the courage to publish so extraordinary a mistake have also failed in explaining the word يعيرة below.

§ 7. ORNAMENTS.

The ornaments used by the Urtukis are few.

The principal are:—

1. The Urtukī damghah or badge (☞).
2. An ornament (which I have called 'fleuron' in the catalogue) resembling two leaves growing in opposite directions horizontally.
3. A sort of inverted chevron (v), identical in form with the orthographical sign called *Muhmilleh*,¹⁰ but not used diacritically, as the muhmilleh is.
4. A semicircle, with the diameter upwards and horizontal (⌣).
5. Points, single, or grouped by two or three.

§ 8. DIACRITICAL POINTS, ETC.

Diacritical points are used very sparingly on the coins of the Urtukis, and form so unimportant a feature that I have not thought it necessary to record them.

A centre-point is generally observable, where the point of one limb of the compasses was placed when the marginal circles were being scored.

Near the edge of the coin is generally a circle, or several circles, usually composed of dots.

¹⁰ Cf. SILV. DE SACY, *Gramm. Arabe*, 2nde ed., T. I., p. 12.

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Words or letters in round brackets are inserted from other specimens: those in square brackets are inserted conjecturally.

The weight of each coin is given in grammes and centigrammes; and the diameter on Mionnet's scale.

The term "same" does not imply that the coin so denominated is of the same die as the preceding coin, but simply that there is no difference of importance.

The types are arranged in chronological order so far as is practicable: the dated types being put first, and the dateless after; unless there is strong evidence that the dateless type is earlier than the dated.

When a reference to an author in the fifth column is enclosed in square brackets, it is to be understood that the author referred to has published the coin to which the reference is attached very imperfectly or erroneously: the brackets are not put unless the error or omission is of importance.

I.=Obverse: II.=Reverse: A.=Area: M.=Margin.

(The numbers on the plate refer to the numbers in the catalogue.)

STANLEY LANE POOLE.

BRITISH MUSEUM,
Aug. 14, 1873.

CATALOGUE OF URTUKĪ COINS.

I. In the British Museum.

A. URTUKIS OF KEYFĀ.

IV. FAKHR-ED-DĪN KARĀ-ARSLĀN. 544-562. 1149.₆₀-1166.₇.

No.	Weight.	Diameter.	Date. A.H.	Edited or Inedited.	Description.
1 Æ	17	IX	556	Marsden, CXLVII. [Frachn, <i>Nov. Supp.</i> p. 73.]	<p>Type I.</p> <p>I.</p> <p>Half figure to right: in left hand, sceptre; in right, orb. [Copied, probably, from a coin of the Byzan- tine type, seen on the coins of Constantine VI. and Eirene.]</p> <p>II.</p> <p>بن داود</p> <p>الملك العادل</p> <p>لم العادل</p> <p>فخر الدين</p> <p>Below, fleuron.</p> <p>No points except the diacritical points of ثنو, and the centre-point of the reverse. ثنو represents 556; the numerical value of ث being 500, of ن 50, and of و 6. The ا of قر is omitted, as on many other examples.</p>
2 Æ					<p>2.</p> <p>Same.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
3 Æ	13.5	IX	560	Castiglioni, CLXIX. Reiske, <i>Repert. für Bibl. u. Morg. Lit.</i> xi. 2.	<p>Type II.</p> <p>I. 1.</p> <p>لا إله إلا الله</p> <p>Head, facing.</p> <p>محمد رسول الله</p> <p>المستجيد بالله</p> <p>II.</p> <p>ملك الأمراء</p> <p>وقرأ أرسلان بن وخمسائة</p> <p>داود بن سكرمان</p> <p>بن أرتق</p> <p>2. Same.</p>
4 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
5 Æ	14	IX	562	Pietrasz., 274.	<p>Type III.</p> <p>I. 1.</p> <p>Half-figure, facing. ثاني وستين وخمسمائة [Copied, perhaps, from a Byzantine coin representing the Virgin.]</p> <p>II.</p> <p>ملك الأمراء قرا أرسلان بن داود بن سكمان بن أرتق المستأجد بالله</p>
6 Æ					2. Same.
7 Æ			570	Reiske, <i>Rep.</i> xi. 3.	3. Same : but small winged figure, to left, behind left shoulder of central figure : and, on the opposite side, سبعين وخمسمائة
8 Æ					4. Same as (3). These two latter coins must have been struck by Nūr-ed-dīn, using his father's reverse; unless, indeed, the historians are wrong in the date of Kārā-Arslān's death; to argue from the coins, this event should have taken place in 570 or 571.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
9 Æ	13	ix		Karabacek, <i>Num. Zeit.</i> Bd.i., 1869, p. 286, <i>note.</i> Eichhorn, <i>Rep.</i> xviii. p. 36. Barthélemy <i>Mém. de</i> <i>l'Acad. des</i> <i>Inscr. et Bel-</i> <i>les-lettres</i> , T. xxvi. (1753) no. 11, p. 565	<p>Type IV.</p> <p>1.</p> <p>I. A. Full figure of winged Victory to right; holding in right hand tablet inscribed $\begin{smallmatrix} \text{VOT} \\ \times \times \times \end{smallmatrix}$, and in left hand wreath; beneath sis.</p> <p>M. VICTORIA CONSTANTINIAUG.</p> <p>[Copied from a coin of Constantine, struck at Siscia, in Pannonia.]</p> <p>II.</p> <p>بن داود</p> <p>ع الملك العا د</p> <p>سما لم العادل د</p> <p>فخر الدين</p> <p>Below, ornament.</p> <p>2.</p> <p>Same.</p>
10 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
11 Æ	8.5	VII		Soret, 2 ^{nde} <i>Lettre</i> , pt. 2, <i>Rev. Num.</i> <i>Belge</i> , 2 ^{nde} Série, T. iv. p. 398	Type V. I. طه حرو 1. الدومنيك The common late-Byzan- tine type of Christ, aureo- late, sitting on throne, holding book. [Copied from a coin of Manuel I. Comnenus.]
12 Æ					II. بن داود ع الملك العا ما لم العادل فخر الدين 2. Same : except slight differences in dots, etc.
13 Æ				Fraehn, <i>Rec.</i> p. 163.	3. Same as (1): except that for طه حرو is substituted ٠ ٨ ١٤ ١٣٥ ١٤٢
14 Æ					4. Same as (3), but a countermark, of unintelligible device, is struck on the obv. left, near the bottom.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
15 Æ	6	VI		Soret, <i>l.c.</i> Pietr., 275. Eichhorn, <i>Repert.</i> xviii. 36.	<p>Type VI.</p> <p>1.</p> <p>I. Bust of Christ, head surrounded by an aureole of six rays; four dots between alternate pairs of rays. In the field, IC XC and a cross +, and signs designed apparently to represent the letters EMMANOTHA. [A common Byzantine type.]</p> <p>II.</p> <p>بن أرتق ضرب هذا الدرهم في أيام فخر الدين قرا أرسلان</p>
16 Æ					<p>2.</p> <p>Same, except two instead of four dots between the alternate pairs of rays, and a straight line over XC, besides that over IC seen on the preceding coin.</p>

V. NŪR-ED-DĪN MOHAMMAD. 562-581. 1166.-1185.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
17 Æ	12	ix	571	Marsden, CLIII. Pietrasz. 276. [Eichhorn, <i>Rep.</i> xviii. 35.]	<p>Type I.</p> <p>1.</p> <p>I. Angel, aureolate; right wing raised; left hand holding seroll, which hangs over right arm. سنة احدى وسبعين</p> <p>II. ملك الأمراء محمد بن قرا أرسلان بن داود بن سكر الله بن أرتق نصير أمير المؤمنين</p> <p>2.</p> <p>Same.</p>
18 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
19 Æ	11	ix	576	Pietrasz., 278. [Eichhorn, <i>Rep.</i> , xviii. 42. most im- perfect.] [Marsden, clv.]	<p>Type II.</p> <p>1.</p> <p>I. Within cusped point- ed arch of double lines, figure, seated on throne; in right hand orb, in left sceptre. Two balls represent the arms of the throne. Above the arch two angels, each spreading a wing over the acme of the arch.</p> <p>ما ثة وخمس وسبعين سنة</p> <p>II. الناصر</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>ملك الأمراء محمد بن قرا أرسلان بن داود بن سكرمان بن أرتق نصير</p> </div> <p>أمير المؤمنين الإمام</p> <p>لدين الله</p> <p>2.</p> <p>Same.</p>
20 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
21 Æ	16	IX	578	[Adler, <i>Coll. Nov.</i> LXXXIII.] Castigl. CLXX.	<p>Type III.</p> <p>1.</p> <p>I. A. Head to left, diademed. [Copied from coin of Seleucus II., but re- versed; the engraver having copied the coin direct on to the die, without first reversing it.]</p> <p>M. على اسم الله ضرب بالحصن سنة ثمان وسبعين وخمس مائة</p> <p>II.</p> <p>ملك الأمراء محمدي العدل نور الدين محمد بن قرا أرسلان بن بن أرتق نصير الإمام الناصر لدين الله</p> <p>2.</p> <p>Same; but the obverse die, in striking, did not coincide with the plaque.</p>
22 Æ					

VI. KUTB-ED-DĪN SUKĀN II. 581-597. 1185.₀-1200.₁.

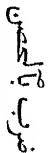
No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
23 Æ	9·5	VIII	581	[Reiske, <i>Rep.</i> xi. 11.]	<p>Type I.</p> <p>1.</p> <p>I. A. Bearded head of king to left.</p> <p>[Copied from Sassanian coins.]</p> <p>M. على اسم الله ضرب بآلحصن سنة أحد وثمانين وا خمسة مائة</p> <p>(The last two words are in an inner line, for want of space in the outer.)</p> <p>II. لدين الله</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>الملك العادل قطب الدین سکمان بن محمد یں قرا أرسلان بن ارتق معین الإما</p> </div> <p>م الناصر Ornament over سکمان.</p>
24 Æ				Inedited.	<p>2.</p> <p>Same: but at sides</p> <p>الملك الناصر | يوسف بن أيوب</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
25 Æ	10	viii	584	[Castigl. LXXI.] [Marsden, CLIV.]	<p>Type II.</p> <p>1.</p> <p>I. سنة أربع وثمانين وخمسمئة</p> <p>Two heads, back to back. [Copied from coin of Augustus and Agrippa struck at Nemausus (Nismes).]</p> <p>II. لدين الله</p> <p>الملك العادل قطب الدّين سكران بن محمد بن قرا أرسلان بن أرتق معين الإما م الناصر</p> <p>2.</p> <p>Same: but م in same line as الإما.</p> <p>3.</p> <p>Same: but reverse double struck, the coin having been turned nearly half a circle, and then struck again.</p>
26					
27 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
28 Æ	10·5	VIII	594	Adler, <i>Coll. Nov.</i> LXXV. [Vaux, <i>Atabeks</i> , v] Pietr. 289. [Marsden, CLIX.]	<p>Type III.</p> <p>1.</p> <p>I. A. Half figure facing, with helmet, and aureole; holding in right hand sceptre; in left, orb. [The idea seems to have been taken from a Byzantine type of about the time of Justinian I.; but the aureole is unaccountable.]</p> <p>M. سنة أربع وتسعين وخمس مائة</p> <p>II.</p> <p>(الإمام)</p> <p>الملك المسعود قطب الدين سكران بن محمد بن قرا أرسلان</p> <p>المؤيد بن الناصر أمير</p> <p>2.</p> <p>Same.</p> <p>3.</p> <p>Same.</p>
29 Æ					
30 Æ					

VII. NĀSIR-ED-DĪN MAḤMŪD. 597-618. 1200.₁-1221.₂.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
31 Æ	13	IX	614	[Castigl. CLXXII.]	<p>Type I.</p> <p>a. (Āmid.)</p> <p>1.</p> <p>I. A. Double-headed Imperial Eagle, (each wing formed by a man's bearded head,) standing on pedestal of interweaved lines. سنة ٦١٤</p> <p>M. الملك الصالح ناصر الدنيا و الدين | محمود بن محمد بن أرتق</p> <p>II. الإمام النا السلطان الغالب عز الدنيا والدين كيكوس بن كيخسرو بن قليم أرسلان</p> <p>* ≡ *</p>
32 Æ					<p>2.</p> <p>Same.</p>
33 Æ					<p>3.</p> <p>Same, except that الدين is divided; ين being put in the lower line, and لب of الغالب in like fashion.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
34 Æ	9	VIII	615	Adler, <i>Coll. Nov.</i> LXXVI. [Fraehn, <i>Rec.p.164.</i>] Castigl. CLXXXIII.	<p>b. (Keyfā.)</p> <p>4.</p> <p>I. Imperial eagle, as before; but wings not human; pedestal different from preceding; and  on eagle's breast.</p> <p>سنة ١٥٠٦</p> <p>II. الإمام</p> <p>الملك الصالح</p> <p>محمد بن أرتق</p> <p>الملك العادل</p> <p>أبوبكر</p>
35 Æ					<p>5.</p> <p>Same.</p>
36 Æ	9	VII	617	Adler, <i>Coll. Nov.</i> LXXVII. Castigl. CLXXIV. Marsden, CLVIII.	<p>c. (Āmid.)</p> <p>6.</p> <p>I. Imperial eagle, as before; but smaller, and inclosed in a circular figure formed by the intersection of two quasi-ovals, which are surrounded by a plain circle and an outer dotted circle.</p> <p>In the interstices formed by the intersections of these figures are the words</p> <p>(Inner) الملك | الصالح | ناصر | الدين</p> <p>(Outer) محمود | بن محمد | بن قر | أرسلان | بن أرتق</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
					<p>II. Hexagram, within circle. In centre, الملك الكامل</p> <p>In the triangular spaces between lines of hexagram, ضرب | بآمد | سنة | سبع | عسرا | ستمائة</p> <p>In spaces between hexagram and circle, الإمام | الناصر | أحمد | ناصر | الدين | محمد</p>
37 Æ			617		<p>7. Same: but differently divided. محمد بن | محمد</p>
38 Æ					<p>8. Same as (6). d. ?</p>
39 Æ	13	VIII	610-18	Inedited.	<p>9. I. A. Imperial eagle within circle. ناصر الدنيا والدين محمد بن محمد ؟ M...</p> <p>II. عشر ؟ الإمام الناصر : : لدين الله أمير ستمائة بن المؤمنين الملك الكامل محمد بن ؟ أبو بكر</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
40 Æ	9	IX	618	Inedited.	<p>Type II.</p> <p>1.</p> <p>I. Man on lion, holding in right hand sword; محمد behind, Urtukēe dam- عبد ghah.</p> <p>ناصر</p> <p>II. A.</p> <p>الملك الصالح الملك الكامل محمد</p> <p>M. الإمام التاصر أمير المؤمنين صرب سنة ثمان عشر؟</p> <p>2.</p> <p>Same, as far as it can be read.</p> <p>3.</p> <p>Same, as far as it can be read.</p>
41 Æ					
42 Æ					

VIII. RUKN-ED-DĪN MÖDÜD. 618-629. 1221.₂-1231.₂.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
43 Æ	11	VIII	621	[Adler, <i>Coll. Nov.</i> LXXVIII.] Castigl. CLXXV. [Reiske, <i>Rep.</i> xi. 21.]	<p>Type I.</p> <p>1.</p> <p>I. Small Imperial eagle, in circle, within square, within second circle, the whole surrounded by dotted circle. In spaces between inner circle and square, ضرب | بآمد | سنة | ٦٢١ In spaces between square and outer circle, الملك المسعود | ركن الدين | مودود بن | محمود بن أرتق</p> <p>II. Same arrangement of circles and square, except that the central circle is ornamented with four loops. Within inner circle, الملك الكامل In spaces between inner circle and square, الملك | الأ | شرف | موسى In spaces between square and outer circle, لا إله إلا الله | محمد رسول الله | [الله] | الإمام الناصر الدين الله أمير المؤمنين</p>
44 Æ			„	Inedited.	<p>2.</p> <p>Same, but date reversed | ٦٢٢.</p>
45 Æ					<p>3.</p> <p>Same.</p>

B. URTUKĪS OF KHARTAPIRT.

I. 'IMĀD-ED-DĪN ABŪ-BEKR. 581—circ. 600. 1185₅-1203₄.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
46 Æ	10.5	VIII	58*	[Adler, <i>Coll. Nov.</i> LXXIV.]	<p>Type I.</p> <p>1.</p> <p>I. Figure, almost naked, riding on serpent, tail of serpent coiled six times, extremity held in left hand of figure.</p> <p>II.</p> <p>الملك الأمراء محيى العدل عماد الدين أبو بكر بن قرا أرسلان بن بن أرتق نصير الإمام الناصر لدين الله</p> <p>The words عثمانين are inserted from Col. Seton Guthrie's specimen.</p>
47 Æ	6.5	VI	588?	[Fraehn, <i>Nov. Supp.</i> p. 270. 14.] [Id. <i>Nov. Symb.</i> p. 44.]	<p>Type II.</p> <p>1.</p> <p>I. Head to left, diademed.</p> <p>II.</p> <p>ملك الأمراء أبو بكر بن قرا أرسلان بن أرتق التا صر لدين الله</p>
48 Æ					<p>2.</p> <p>Same.</p>

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

In the *Revue de la Numismatique Belge*, cinquième série, tome 5, première livraison, are the following articles:—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*," Supplement (8th article), by M. le Lieut.-Colonel P. Mailliet.

2. "Imitations of certain Monetary Types peculiar to Lorraine and its neighbourhood," by M. Chautard.

3. "Inedited Medals and Jetons relating to the History of the Seventeen Ancient Provinces of the Low Countries," by M. le Comte Maurin Nahuys.

4. "Rare Coins from the Marsoilles Cabinet," by M. Laugier.

5. "John of Arendal and the Coins of the Lords of Rhœdt and of Well," by M. le Baron de Chestret de Haneffe.

6. "Notice of some Coins of Liège," by M. le Dr. Dugniolle.

In the *Mélanges* are reviews of recent numismatic publications, and in the *Nécrologie* are recorded the deaths of MM. C. P. Serrure and Jules Borgnet.

In the deuxième livraison are the following articles:—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*," Supplement (9th article), by M. le Lieut.-Colonel P. Mailliet.

2. "A Document concerning the Values of the Ancient Coins of Flanders, Brabant, &c., drawn up in 1600, by Gilles van Halbeeck, one of the principal Mint-Masters of the Archdukes Albert and Isabella, in the Low Countries," by M. J. Rouyer.

3. "Inedited Medals and Jetons relating to the History of the Seventeen Ancient Provinces of the Low Countries" (4th article), by M. le Comte Maurin Nahuys.

4. "Numismatic Curiosities. Rare or inedited Jetons and Coins" (19th article), by M. R. Chalon.

In the *Mélanges* are notices of recent numismatic publications, and in the *Nécrologie* is recorded the death of M. G. Combrouse.

In the troisième livraison are the following articles:—

1. "Catalogue of Obsidional Coins and *Pièces de Nécessité*," Supplement (10th article), by M. le Lieut.-Colonel P. Mailliet.

2. "Groats with the Horseman Type." Letter to M. Chautard, by M. Hooft van Iddekinge.

3. "Rare Coins in the Royal Collection at the Hague," by M. J. F. G. Meijer.

4. "Charity Tokens, Ecclesiastical and Religious, of the City of Bruges," by M. de Schodt.

In the *Correspondance* are various letters to M. R. Chalon, the President of the Belgian Numismatic Society.

In the *Mélanges* are reviews of recent numismatic publications, and in the *Nécrologie* is recorded the death of M. Adolphe Desvismes.

In the *Berliner Blätter*, Band VI., Part III., Berlin, 1873, are the following articles:—

1. "The Plonsk Find of Coins," by H. Dannenberg (conclusion).
2. "Three Finds of Mediæval Coins in Russia," by J. Iversen.
3. "On an inedited Gold-Gulden of Rummen."
4. "Contributions to the Numismatic History of Berlin," by Herrn Vossberg and Schlickeysen.

The part concludes with notices of the newest current coins and medals, and the latest literature.

We hail the appearance of the first number of a new Numismatic Journal in Berlin, edited by Dr. Alfred von Sallet, of the Königl. Münzkabinet, entitled *Zeitschrift für Numismatik*. It is to be devoted exclusively to ancient and mediæval coins; and, if one may judge from the names of the contributors to the present number, it is certain to take a high rank among numismatic periodicals. This first part contains articles on Greek and Roman coins, by Ernst Curtius, A. von Sallet, A. von Rauch, and J. Brandis, and on mediæval by H. Dannenberg.

Egypte Ancienne, deuxième partie, Domination Romaine, par F. Feuarent, Membre de la Société des Antiquaires de Normandie.

The first part of this work, which was noticed in the NUMISMATIC CHRONICLE, N.S., Vol. IX., p. 370, was crowned by the Académie in 1870, the prize for Numismatics, founded by the late M. Allier de Hauteroche, being adjudged to the author. It treated of the ancient coins of Egypt under the Ptolemies. The present volume completes the numismatic history of the country, carrying it down to the end of the Roman dominion. These handsome volumes will be the standard work upon this branch of Numismatics. We need say no more about this concluding part than that it in no way falls short of its predecessor. It is accompanied by four-and-twenty beautiful plates by Masson, and the portion devoted to the Nomes is illustrated by numerous woodcuts. The price of this volume is 15 francs.

MISCELLANEA.

SALE OF COINS.—The important collection formed by the late J. B. Bergne, Esq., F.S.A., was disposed of by Messrs. Sotheby, Wilkinson, and Hodge, May 20th, 1878, and ten succeeding days, and produced above £6,000. The following pieces are selected as being the most worthy of note. Lot 15. Verica, *N.*, *Evans*, pl. 2, n. 10—£9 10s. Lot 45. Cuthred, *R.*, rev. EABA within a tribrach, found in Bedfordshire—£9. Lot 47. Baldred, *R.*, published in the *Num. Chron.*, vol. xv., p. 102; found near Aylesford—£20 5s. Lot 49. Offa, *R.*, rev. IBBA between the floral ends of a diamond-shaped ornament, *Rud.* pl. 4, n. 13, from the Huxtable Cabinet—£15 5s. Lot 54. Offa, *R.*, rev. BANNARD in two compartments across the field, *Lindsay's Heptarchy*, pl. 6, n. 137, published from this coin—£20. Lot 56. Offa, *R.*, rev. IBBA, in the angles of a long cross-crosslet, found near Kilkenny—£20 10s. Lot 57. Cynethreth, Queen of Offa, *R.*, a variety of *Rud.* pl. 5, n. 2, from the Murchison Cabinet, found in Bedfordshire—£50 5s. Lot 70. Ceolwulf I., *R.*, *Rud.* pl. 8, n. 2—£12 2s. 6d. Lot 77. Beonna, *R.*, *Hks.* 88, from the Dymock and Murchison Cabinets—£23. Lot 98. Eric, *R.*, *Rud.* pl. 11, n. 3; rev. RADVLF . MO . in two lines across the field, from the Brisbane, Brumell, Addison, and Murchison Cabinets—£16. Lot 109. Abp. Jarnberht, *R.*, *Rud.* pl. 12, from the Atherley and Murchison Cabinets—£21. Lot 110. Abp. Æthilheard, *R.*, *Rud.* pl. 13, n. 3, from the Devonshire, Dymock, and Murchison Cabinets—£36. Lot 128. Ecgbearht, *R.*, *Hks.* 157, from the Murchison Cabinet—£9 5s. Lot 129. Ecgbearht, *R.*, rev. BIONEL . MONETA . and in the centre the king's name in monogram, from the Addison and Murchison Cabinets—£10 5s. Lot 130. Ecgbearht, *R.*, *Rud.* pl. 30, n. 6, from the Martin Cabinet—£12 5s. Lot 147. Ethelbert, *R.*, *Rud.* pl. 15, n. 3, from the Cuff, Dymock, and Murchison Cabinets—£15. Lot 159. Alfred, *R.*, *Num. Chron.*, N.S., vol. x., pl. 4, n. 8, from the Huxtable and Murchison Cabinets—£16 10s. Lot 160. Alfred, *R.*, *Num. Chron.*, N.S., vol. x., pl. 2, n. 3, engraved from this coin, from the Cuff Cabinet—£22. Lot 161. Alfred, *R.*, type as the preceding, from the Huxtable and Murchison Cabinets—£10. Lot 171. Alfred halfpenny, a variety of *Num. Chron.*, vol. v., pl. 3, n. 30, from the Martin and Murchison Cabinets—£14 5s. Lot 176. Edward the Elder, *R.*, *Rud.* pl. 16, n. 9—£13. Lot 178. Edward the Elder, *R.*, rev. a tower

or front of a church—£13 7s. 6d. Lot 181. Edward the Elder, R., rev. VBERHTO in a single line across the field, from the Devonshire and Cuff Cabinets—£5 5s. Lot 182. Edward the Elder, R., rev. ALFNTAN . MO, an armed hand reaching from the clouds—£15 15s. Lot 183. Edward the Elder, R., a variety of the previous coin—£15 15s. Lot 184. Edward the Elder, R., rev. BA = Bath, across the field, from the Cuff, Dymock and Murchison Cabinets—£10 10s. Lot 289. William I., penny, of the London mint, *Num. Chron.*, vol. xiv., p. 149, probably unique—£7 2s. 6d. Lot 304. William I., penny, of the Lincoln mint, *Hks.* 244 with reverse of 242—£7 15s. Lot 305. William I., penny, Lincoln mint, *Hks.* 240—£8 5s. Lot 329. Henry I., penny, *Hks.* 267, of the Wareham mint, probably unique—£10 15s. Lot 335. Stephen, penny, with flag, *Hks.* 271—£10 2s. 6d. Lot 335*. Stephen and Matilda, penny, *Hks.* 281, from the Lockyer, Grainger, Tutet, Tyssen, and Durrant Cabinets—£19. Lot 336. Eustace, penny, *Hks.* 282, from the Dimsdale and Durrant Cabinets—£10 5s. Lot 401. Richard II., half-noble, *Rud. pl.* 2, n. 11—£10 10s. Lot 403. Richard II., half-noble, with flag, not in the Tyssen, Durrant, Cuff or Murchison Cabinets—£15. Lot 416. Henry VI., light half-groat, of the York mint—£5. Lot 425. Henry VI., half-noble, with flag, of the Calais mint, from the Dimsdale and Cuff Cabinets—£5 2s. 6d. Lot 467. Edward IV., half-angel, *Rud. n.* 12, from the Durrant, Dymock, and Murchison Cabinets—£7 15s. Lot 476. Richard III., angel, *Rud. pl.* 4, n. 1—£11 2s. 6d. Lot 484. Henry VII., shilling, from the Hollis and Durrant Cabinets—£21 5s. Lot 489. Henry VII., sovereign or double rial, *Rud. pl.* 4, n. 4, from the Edmonds Cabinet—£35 10s. Lot 522. Henry VIII., sovereign, 34th year, *Rud. pl.* vi., n. 1, from the Durrant, Dymock, and Martin Cabinets—£33. Lot 523. Henry VIII., sovereign, 37th year, *Rud. pl.* vi., n. 10, from the Durrant Cabinet—£9 10s. Lot 536. Edward VI., half-crown, 1551, horse walking, from the Trattle and Durrant Cabinets—£9 5s. Lot 545. Edward VI., sovereign, 3rd year, *Rud. pl.* vii., n. 3, from the Martin Cabinet—£18. Lot 548. Edward VI., eighth of the sovereign, *Rud. pl.* vii., n. 10—£10 5s. Lot 552. Edward VI., double sovereign, 4th year, wt. 476 grs., *Rud. pl.* viii., n. 1, from the Hollis, Willett, and Edmonds Cabinets—£165. Lot 557. Edward VI., eighth of the sovereign, *Rud. n.* 9, from the Martin Cabinet—£10 5s. Lot 561. Mary, Irish groat, from the Martin Cabinet—£14 5s. Lot 562. Mary, Irish penny, from the Martin Cabinet—£11 5s. Lot 564. Mary, rial, *Rud. ix.*, n. 2, from Paris—£53. Lot 566. Mary, half-angel, *Rud. n.* 4—£31. Lot 574. Philip and Mary,

angel, *Rud.* ix., n. 5—£14. Lot 583. Elizabeth, milled shilling of the large size, from the Tyssen, Trattle, and Durrant Cabinets—£10 5s. Lot 592. Elizabeth, rial, *Ibid.* ix., n. 7, from the Hollis and Durrant Cabinets—£20. Lot 615. Elizabeth, pattern sixpence, 1575, *Ibid.* xiii., n. 14, from the Hollis and Cuff Cabinets—£31. Lot 622. James I., "exurgat" half-crown—£10 15s. Lot 623. James I., "exurgat" shilling—£7 5s. Lot 626. James I., crown, second coinage, *Ibid.* xvii., n. 1—£10. Lot 649. James I., noble or rial, *Ibid.* n. 2—£9 15s. Lot 650. James I., "exurgat" piece, *Ibid.* n. 5, from the Devonshire Cabinet—£11. Lot 651. James I., fifteen-shilling piece, *Ibid.* n. 6—£20. Lot 709. Charles I., Chester half-crown, *Ibid.* xxvi., n. 2, from the Cuff Cabinet—£17. Lot 712. Charles I., Exeter half-crown, 1642, horse curvetting among arms—£22 10s. Lot 713. Charles I., Exeter half-crown, *Hks.* 488, from the Dimsdale Cabinet—£21. Lot 725. Charles I., Oxford pound piece, 1644, of fine work, from the Cuff and Murchison Cabinets—£26 5s. Lot 726. Charles I., Oxford half pound, *Ibid.* xii. n. 13, from the Dimsdale, Thomas, Dymock, and Murchison Cabinets—£10 10s. Lot 739. Charles I., Oxford shilling, 1644 ox., from the Currer and Murchison Cabinets—£10 5s. Lot 744. Charles I., Worcester half-crown, from the Devonshire and Cuff Cabinets—£9 10s. Lot 748. Charles I., York half-crown, *Hks.* 495, from the Dimsdale and Durrant Cabinets—£11 12s. 6d. Lot 788. Pontefract two-shilling piece, wt. 152 grs., from the Devonshire Cabinet—£10 2s. 6d. Lot 794. Inchiquin sixpence—£9 2s. 6d. Lot 795. Inchiquin groat, *Ibid.* xxvii., n. 3, from the Martin Cabinet—£10 12s. 6d. Lot 804. Charles I., half-sovereign, 1st coinage, *m.m.* trefoil, from the Martin Cabinet—£12. Lot 820. Charles I., three-pound piece, 1643, from the Devonshire Cabinet—£10 5s. Lot 821. Charles I., three-pound piece, 1643, Oxon.—£17. Lot 822. Another of less diameter, with 1644, Oxon.—£11. Lot 846. Charles I., pattern half-crown, *Rud.* xix., n. 3—£45. Lot 849. Charles I., pattern for a sovereign, *R.* 1630, *Snelling*, vi., n. 1, from the Browne and Tyssen Cabinets—£40 10s. Lot 854. Charles I., pattern sovereign, *Snelling*, vi., n. 4, from the Trattle, Cuff, and Brown Cabinets—£19 10s. Lot 856. Charles I., pattern sovereign, *Snelling*, vi., n. 5, from the Hollis Cabinet—£30. Lot 876. Commonwealth, pattern half-crown, 1651, by *Ramage*, from the Barker and Thomas Cabinets—£24 10s. Lot 877. Commonwealth pattern shilling, by *Ramage*, from the Tutet, Tyssen, Trattle, and Durrant Cabinets—£23 10. Lot 878. Commonwealth, pattern sixpence, by *Ramage*—£17. Lot 879. Commonwealth, Blondeau's half-crown, *Snelling*, vi., n. 13

—£20 10s. Lot 880. Commonwealth, Blondeau's half-crown, *Snelling*, vi., n. 14, from the Devonshire Cabinet—£20. Lot 881. Commonwealth, Blondeau's shilling, *Snelling*, vi., n. 12—£15 5s. Lot 895. Cromwell, half-broad, 1658—£10 15s. Lot 896. Charles II., hammered half-crown with numerals and inner circle, *Rud.* xxxiii., n. 11, from the Devonshire and Cuff Cabinets—£19 10s. Lot 897. Charles II., of similar type, but without numerals or inner circle, *Rud.* n. 1, from the Durrant Cabinet—£19 10s. Lot 908. Charles II., ten-shilling, *hammered*, without numerals, *Rud.* xv., n. 3, from the Martin Cabinet—£10 2s. 6d. Lot 963. Charles II., proof crown, 1662, without rose, plain edge, from the Tyssen and Bowles Cabinets—£14. Lot 964. Charles II., pattern crown, bust without drapery, and reading DEI GRATIA, on the edge DECUS ET TUTAMEN. From the Devonshire and Cuff Cabinets—£30. Lot 965. Charles II., celebrated "Reddite" crown, *Rud.* 34, n. 7—£80. Lot 967. Charles II., Simon's pattern sovereign, R., rev. MAGNALIA DEI, 1660, *Rud.* 34, n. 1, from the Tyssen, Trattle, Edmonds, Cuff, and Murchison Cabinets—£11. Lot 968. Charles II., another by Simon, R., obv. PROBASTI . ME . DNE . SICUT . ARGENTUM, a curious allusion to the fortunes of the king, *Rud.* 34, n. 3, from the Pembroke, Sparkes, and Murchison Cabinets—£11. Lot 973. Charles II., pattern sovereign by Simon A., rev. MAGNALIA . DEI, 1660, edge grained, *Rud.* 34, n. 1, from the Tyssen, Trattle, and Cuff Cabinets—£17 15s. Lot 1090. Anne, pattern guinea, with A . R in monogram in centre of reverse, plain edge, *Snel. patterns*, pl. 6, n. 19—£42 10s. Lot 1091. Anne, proof guinea, 1702, usual bust, rose in centre of reverse, plain edge—£10. Lot 1110. George I., pattern half-crown, 1715, plain between the shields on reverse, from the Tyssen Cabinet—£11 3s. Lot 1112. George I., pattern guinea, 1727, laureate head in much higher relief than the current coin, from the Trattle, Cuff, and Hawkins Cabinets—£13. Lot 1,137. George II., proof five-guinea, young head, 1731, inscribed edge, from the Edmonds and White Cabinets—£20 10s. Lot 1138. George II., proof two-guinea, young head, 1733, plain edge, from the Dimsdale and Durrant Cabinets—£12 5s. Lot 1191. George III., pattern crown by *Pistrucci*, laureate head to right GEORGIUS III. D.G. BRITANNIARUM REX F.D., 1817; rev. St. George and the Dragon encircled by the motto of the Garter on a plain band within a dotted circle, edge inscribed in small letters between grained edges, DECUS ET TUTAMEN, ANNO REGNI LVIII—£14. Lot 1193. George III., pattern crown by *Pistrucci*, a very large bust, with titles; rev. St. George and the Dragon surrounded by the Garter, which is filled up with horizontal lines, date 1818, with the artist's name

under the head, plain edge—£11 15s. Lot 1214. George III., pattern five-guinea, 1773, by *Tanner*, royal arms on a garnished shield crowned, plain edge—£24. Lot 1215. George III., pattern five-guinea, 1777, by *Yeo*, similar type, but head different, plain edge, from the Strawberry Hill and Cuff Cabinets—£24. Lot 1217. George III., pattern five-guinea, 1773, by *Tanner*, plain edge, type as five-guinea—£10 5s. Lot 1218. George III., pattern two-guinea, 1777, by *Yeo*, plain edge, type as five-guinea of same date—£14. Lot 1226. George III., pattern guinea, 1787, by *Pingu*; rev. royal arms in a circular shield within the Garter, plain edge, from the Murchison Cabinet—£10 5s. Lot 1232. George III., pattern half-guinea, head to right, incuse; rev. arms in four sunken ovals cruciformly arranged, abbreviated titles, plain edge, from the Cuff and Hawkins Cabinets—£12 5s. Lot 1245. George III., pattern sovereign, 1816, head like that on the shilling; rev. shield of arms crowned, plain edge—£10 10s. Lot 1247. George III., pattern five-pound, 1820, by *Pistrucchi*, rev. St. George and the Dragon, without legend, edge inscribed DECUS, &c., ANNO REGNI LX—£26. Lot 1249. George III., pattern half-sovereign, 1820; rev. rose, thistle and shamrock on one stem surmounted by a crown, BRITANNIARUM, &c., plain edge—£13. Lot 1267. George IV., pattern crown, 1829, by *Wm. Wyon*, large bust in low relief; rev. royal arms surrounded by the collar of the Garter displayed on a mantle, crowned, the pendant of St. George below, plain edge—£19 10s. Lot 1282. William IV., pattern crown, without date, with w.w. in incuse letters under the bust, plain edge—£12 12s. Lot 1285. William IV., pattern crown, 1834, type as before but with ANNO 1834 below the arms, plain edge—£10 5s. Lot 1313. Victoria, pattern five-pound, with the badge of the Garter on the Queen's robe, plain edge—£13.

XV.

THE GREEK AUTONOMOUS COINS FROM THE
CABINET OF THE LATE MR. EDWARD WIGAN,
NOW IN THE BRITISH MUSEUM.

PART II.

(Continued from p. 124.)

BEFORE I proceed to describe the remaining portion of the Wigan autonomous coins, I must make some important rectifications with regard to the following pieces wrongly described in the first part of this catalogue.

No. 26, p. 102.—Salinas in his article "Sul tipo de tetradrammi di Segesta," in the *Periodico di Numismatica e Sfragistica*, vol. iii., proves, I think satisfactorily, that the hunter on the reverse of the tetradrachms of Segesta is not Akestes, but Pan ἀγρεός or ἀγρευτής.

No. 49, p. 110.—Dr. Imhoof-Blumer has drawn my attention to an article by Friedlaender (*Berl. Blätt.*, iv. p. 141) on a coin of this type, which he believes to represent *Obv.* Artemis, who has just discharged an arrow, and watches the effect of her shot. *Rev.* one of the daughters of Niobe, who falls back pierced by the arrow of the goddess, which is visible implanted in her bosom: by her side, a child.

The arrow on the coin engraved by Friedlaender is quite distinct, and justifies the above explanation of the

type. His coin reads EPX[OME]NION, and he gives it to Orchomenos in Bœotia, on account of the connection of that town with the Niobe myth (Stark. *Niobe und die Niobiden*, p. 354). Others, however, and among them Dr. Imhoof-Blumer (*Num. Zeitsch.*, iii. p. 370) attribute it to Orchomenos in Arcadia, where several specimens have been found.

No. 61, p. 112.—When I described this piece I was not aware that M. Ferdinand Bompais had already published a dissertation upon it (*Etude historique et critique des portraits attribués à Cléomène III. roi de Lacédémone. Restitution de ces portraits à Antigone II. Doson, roi de Macédoine*, Paris, 1870), in which he proves most satisfactorily that the hitherto generally accepted attribution of the portrait to Kleomenes III. is erroneous, and that there can be little doubt that the head upon the *Obv.* is that of Antigonos Doson.

No one who reads M. Bompais' arguments can fail to be convinced that he is right. The coin in question was struck, there can now be no doubt, by the Lacedæmonians in honour of Antigonos immediately after his victory over Kleomenes at Sellasia, when, instead of sacking or destroying the city, as the inhabitants expected, Antigonos, moved by pity, "*fortunam tantæ urbis miseratus*" (Justin., xxviii. 4), issued a proclamation to the effect that he was not come to wage war with the people of Lacedæmon, but only with Kleomenes, by whose retreat his resentment was fully appeased (Justin., loc. cit.): after which he restored them their laws and autonomy, and, after sacrificing to the gods of the city, returned again to Macedon. The goat, the well-known Macedonian symbol, coupled with the statue of Apollo Amyklæos, on the reverse, is doubtless so placed to associate the memory of Antigonos with

the national deity of the Lacedæmonians, before whose statue we may suppose that the sacrifice above alluded to was celebrated, and where he may have received, at the hands of the Lacedæmonian senate, the golden crown, perhaps alluded to in the wreath which occupies so conspicuous a place in the field of the reverse of this tetradrachm. I have not here space to recapitulate all M. Bompais' arguments, and must therefore refer those of my readers who have still any doubts on the matter to the valuable article in question.

No. 65, *p.* 114.—The attribution of this coin to Heræa is disputed by Raoul-Rochette (*Hercule Assyrien*, *p.* 291). He gives it to Heraklea in Bithynia, on the site of which city several pieces of this type have been found.

I now proceed with my catalogue from the point at which I broke off, *p.* 124.

ASIA MINOR, &c. (*continuation*).

MYTILENE LESBI.

94*. *Obv.*—Head of Apollo, right, laureate.

Rev.—^{MY}_{T I} Lyre of eight strings, round right side of which a fillet is tied. In field, left, amphora; the whole within linear square. *Æ.* .9; wt. 167.1. Stater of the Persian standard. *Pl.* XI. *fig.* 1.

KLAZOMENÆ, IONIÆ.

95. *Obv.*—Head of Apollo, full-face towards left, laureate. Chlamys fastened round neck by brooch; in field, left, ΘΕΟΔΟΤΟΣ ΕΠΙΘΕΙ.

Rev.—ΚΑΑ Ι Ο — ΜΑΝΔΡ Ω ΝΑΞ. Swan walking, left, with spread wings. *Æ.* 1; wt. 261.5. *Pl.* XI. *fig.* 2.

96. *Obv.*—Same type, but without chlamys.

Rev.—^{MA}_{KA} ΝΑΡΩΝΑΞ Same type. *Æ.* .5; wt. 31.

The first of these coins is remarkable as furnishing us with a name which is stated on the coin itself to be that of the artist. This can be said of only one other Greek coin, viz., one of Kydonia in Krete, with the legend ΝΕΥΑΝΤΟΣ ΕΠΟΕΙ. On both these specimens we should have expected an aorist rather than an imperfect. See Von Sallet's *Künstler inschriften auf Griechischen Münzen*. Berlin, 1871.

ERYTHRÆ, IONÆ.

97. *Obv.*—Head of young Herakles, left, wearing lion's skin.

Rev.—ΕΡΥ. Artemis standing full-face, with head-dress of Artemis Ephesia, but wearing short chiton and holding spear and pomegranate; in field, right, the legend ΠΟΣΕΙ ΝΙ, *Æ.* .55; wt. 43.5. Pl. XI. fig. 8.

This unique coin belongs to the period when Erythræ, in common with many other cities of Asia Minor, adopted the Attic standard, in the early part of the third century, B.C.

ANTIOCHIA, CARIÆ.

98. *Obv.*—Head of Apollo, left, laureate.

Rev.—ΑΝΤΙΟΧΕ ΙΑΝΑΡΟ. Eagle, with spread wings, standing left, on Mæander pattern. *Æ.* .75.

APOLLONIA SALBAKE, CARIÆ.

99. *Obv.*—ΑΠΟΛΛΩΝΙΑ ΣΑΛΒΑΚΗ. Female bust, right; border of dots.

Rev.—ΚΑΛΛΙΗΠΙΟΥ ΣΤΡΑ . Ω . Asklepios and Hygieia facing one another; the former holding staff, up which serpent twines, the latter feeding a serpent from a patera. *Æ.* .95.

Salbake was a district of Caria which contained the cities of Herakleia and Apollonia, which were therefore distinguished from other cities of the same names by the

addition of the word ΚΑΛΒΑΚΗ. See Leake, Num. Hell. Asia, p. 22.

KERAMOS, CARIÆ.

100. *Obv.*—Head of Zeus, right, laureate.

Rev.—ΚΕΡΑΜΙ ΑΠΟΑ, in two lines; eagle with closed wings standing, right; all within incuse square. Æ. .5.

Keramos was a small town on the coast not far from Knidos. Strabo, xiv., ii. 15. εἶτα μετὰ Κνίδον Κέραμος καὶ Βάργασα πόλιν ὑπὲρ θαλάττης.

HALIKARNASSOS, CARIÆ.

101. *Obv.*—Head of Pallas, right, wearing crested Corinthian helmet, behind Φ (?), border of dots.

Rev.—ΑΑΙ. Owl, right; border of dots. Æ. .45.

MYLASA, CARIÆ.

102. *Obv.*—Forepart of galloping horse, right.

Rev.—ΜΥΛ . ΣΕΩ. Ornamented trident. Æ. .45.

SEBASTOPOLIS, CARIÆ.

103. *Obv.*—ΔΗΜΟC. Head of the Demos, right, laureate; border of dots.

Rev.—ΣΕΒΑΚΤΟ ΠΟΛΕΙΤΩΝ. Female figure standing to the front, wearing long chiton with diploidion, and with a modius upon her head, over which is a veil. Æ. .85. Pl. XI. fig. 4.

Millingen (Sylloge, p. 73) was the first to attribute to Sebastopolis in Caria certain coins bearing the name of Sebastopolis, which before his time had all been given to the better known Sebastopolis in Pontus. The Carian city is mentioned by Hierokles, and in the Notitiæ Ecclesiasticæ, but its exact site is not known. Waddington (Voyage en Asie Mineure, p. 54) is inclined to place

it in the neighbourhood of the modern Turkish town of Moula. The figure on the reverse of this coin occurs on several imperial coins of this city, and is probably a local divinity.

TABA, CARIAE.

104. *Obv.*—Head of bearded Herakles, left; border of dots.

Rev.—TABH NON. Lioness seated, left, and turning her head right as if roaring. Æ. .6.

PIXODAROS, SATRAP OF CARIA.

105. *Obv.*—Head of Apollo, right, laureate.

Rev.—IIIΞΩΔ. Zeus Labrandeus standing, right, holding bipennis over right shoulder and long sceptre. N. .85; wt. 21.4 grs. Pl. XI. fig. 5.

Pixodaros, B.C. 340-335, was the first of this dynasty who struck gold, and even he seems to have only possessed the right of striking small coins in this metal: no gold stater having yet been discovered.

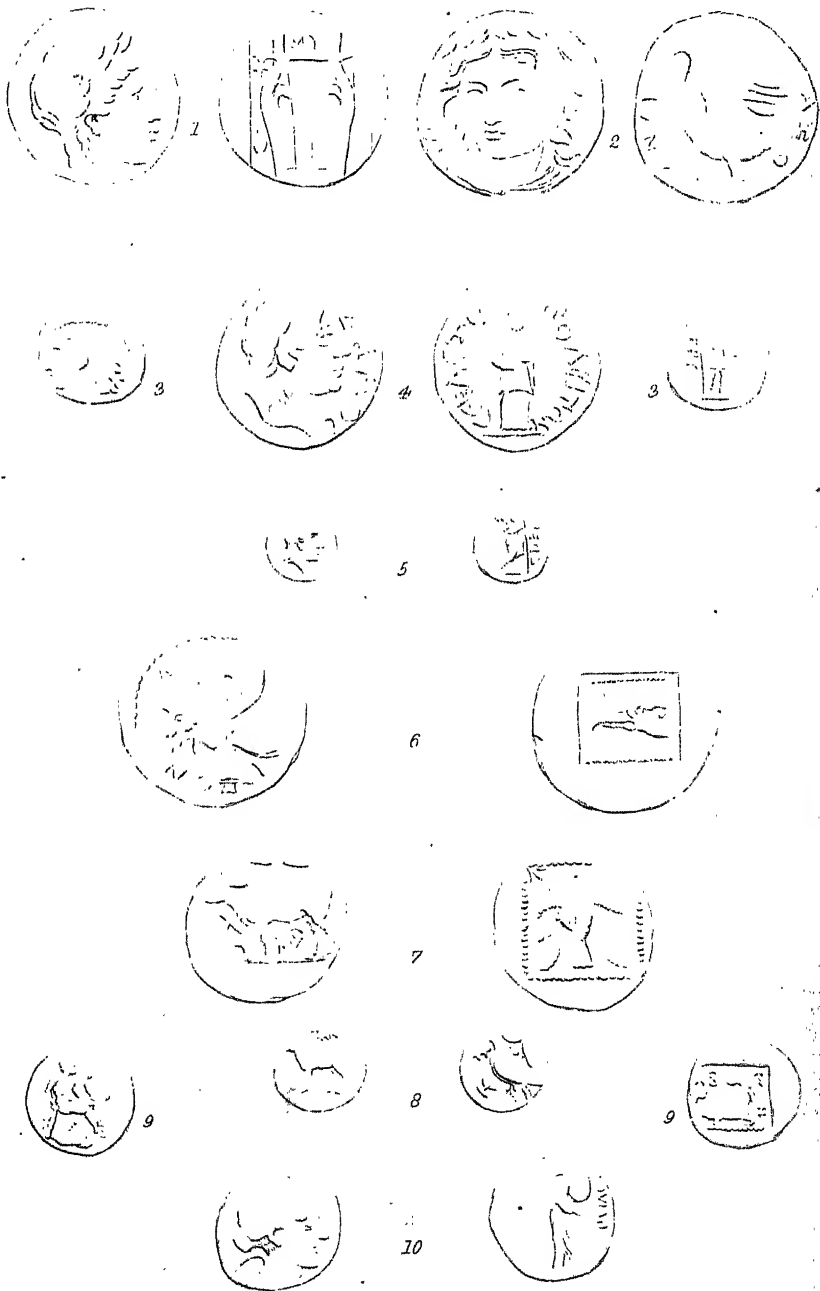
RHODES, IALYSOS.

106. *Obv.*—IAAYΞION. Fore-part of winged boar, left; beneath which, Phrygian helmet; border of dots.

Rev.—IAAVΞION. Eagle's head, left, in an incuse square, within which is a border of dots, and in the left upper corner a floral ornament. Æ. 1.05; wt. 228.4 grs. Pl. XI. fig. 6.

This coin, although the types of both its sides are those of previously known specimens, is of later fabric, being more spread and flatter. It is, however, previous to the introduction of the Ionic alphabet with its long forms H and Ω, which took place at Halikarnassos, and therefore probably in Rhodes, circ. B.C. 449.¹

¹ Brandis, p. 840.



MEGISTE, INSULA CARIÆ.

107. *Obv.*—Head of Apollo, left, surrounded by radiate disc.

Rev.—M E. Rose, half-open, with bud on each side.
R. .5 ; wt. 46 grs.

Megiste was an island subject to Rhodes, and its coins follow the Rhodian types and standard. (Millingen, *Sylloge*, p. 75.)

ISINDOS, PAMPHYLÆ.

108. *Obv.*—Bust of Artemis, right, wearing stephane, over her shoulder is a quiver.

Rev.—ΙΣ ΙΝ. Ear of corn.

For the position of Isindos see Waddington (*Voyage en Asie Mineure*, p. 90).

APOLLONIA MORDIÆON, PISIDIÆ.

109. *Obv.*—Head of Zeus, right, laureate.

Rev.—ΑΠΟΛΛΩΝΙΑΤΩΝ. Amazon, riding right, holding over her shoulder bipennis; beneath horse, Meander pattern. Æ. .75.

110. *Obv.*—ΑΛΕΞΑ ΚΤΙC ΑΠΟΛΛΩΝΙΑΤΩΝ. Head of Alexander the Great as Herakles, wearing lion's skin; border of dots.

Rev.—ΙΙΙΙΟ ΦΟ ΡΑΟ. River-god reclining, left, holding reed and cornucopiæ; under his left elbow is a vase from which a stream flows left. Æ. 1.2.

The mode of distinguishing the coins of the various Asiatic cities bearing the name of Apollonia is most clearly laid down by Waddington (*Voyage en Asie Mineure*, pp. 125-145).

Alexander the Great passed the winter of B.C. 324 in Pisidia, and M. Waddington conjectures that during that period he may have conferred certain favours upon the

city of Apollonia, in return for which he was afterwards distinguished by the title of Founder. The river Hippophoras, on which the city stood, is unknown to the geographers.²

TERMESOS, PISIDIAE.

111. *Obv.*—ΤΕΡ ΜΗCCEΥΝ (*sic*) Θ. Head of Zeus, right, laureate.

Rev.—ΑΥΤΟΝΟΜΩΝ. Male figure, standing left, wearing short chiton, chlamys and helmet (?), holding in right, thunderbolt?, and in left, cornucopia; in field, left, Θ; border of dots. Æ. 1.05.

112. *Obv.*—ΤΕΡΜΗCCEΩΝ. Bust of Solymos (?), left, bearded, wearing crested helmet and cuirass; border of dots.

Rev.—ΤΩΝ[ΜΕ]ΙΝΟΝΩΝ. Solymos standing, left, holding in right spear, and in left parazonium; border of dots. Æ. .95.

There were two towns of this name in Pisidia, but we have coins only of the greater Termessos. Strabo, lib. xiii. cap. 4, 16, says: ἡ δὲ Τερμησσός ἐστι Πισιδικὴ πόλις ἡ μάλιστα καὶ ἑγγιστά ὑπερκειμένη τῆς Κιβύρας. It was built upon a mountain the summit of which was called Solymos, τῆς γούν Τερμησσέων ἄκρας ὁ ὑπερκείμενος λόφος καλεῖται Σόλυμος, καὶ αὐτοὶ δὲ οἱ Τερμησσεῖς Σόλυμοι καλοῦνται. The head of Zeus on the obverse of the first of these coins is probably Zeus Solymeus, and the hero on the reverse of the latter may be Solymos. Cf. Mionnet, Suppl. vii. p. 138-9, who describes coins of similar types, with the legends ZEYΘ COAYMEYΘ and COAYMOC. Preller (Gr. Mythologie, ii. 85) says that the word Solymi signifies in the Phœnician language, "dwellers upon the mountains," and that these people appear to have been of Semitic origin.

² Forbiger, II. p. 334.

SOLI, CILICIE.

113. *Obv.*—Head of Pallas, right, wearing crested Athenian helmet.

Rev.—ΣΟΛΕΩΝ. Bunch of grapes with tendril. \mathcal{A} . .85; wt. 8.2 grs.

The weight of this rare if not unique piece is somewhat remarkable. It seems to me to be the twentieth part of the stater of 168 grains full weight; if so, it would be a new subdivision not included by Dr. Brandis in his table, p. 141, who only mentions the double stater of 20.51 gram., the stater of 10.68, and the twelfth part of the stater of 0.69 gram.

ZEPHYRION, CILICIE.

114. *Obv.*—ΑΔΡΙΑ ΝΟΠΟΛΙΤΩΝ. Bust of Kybele, or the city, veiled and turreted, right.

Rev.—ΖΕΦΥΡ ΙΩΤΩΝ. Lighted altar. \mathcal{A} . .75.

Zephyrion was a small town on the coast of Cilicia not far from Soli. For some unknown reason, it seems to have adopted the epithet Hadrianopolis.

KYPROS.

115. *Obv.*—Bull standing left, above him the mihir, and beneath the inscription Σ - $\text{I} \times \nabla$ (Kition?).

Rev.—Eagle with spread wings in a dotted square, in the upper corners of which is a sprig of olive; the whole in an incuse square. \mathcal{A} . .85; wt. 172.2. Pl. XI. fig. 7.

116. *Obv.*—No inscription. Similar type.

Rev.—Eagle standing, left, with closed wings; in front, $\text{†} \text{†}$ (Ba-si); behind, a sprig of olive; the whole in incuse square. \mathcal{A} . .85; wt. 24.7. Pl. XI. fig. 8.

117. *Obv.*—Herakles seated, right, on rock covered with lion's skin, holding in left cornucopiæ, and resting with right on club; in front, $\text{†}(\text{V} \times$ (Eva., commencement of Evagoras.)

Rev.—Goat seated right; around, Π Ϝ ε ϙ ≠ (Ba-si-le-o-s); the whole in incuse square. *AR.* 1·05; wt. 51·4; *Pl.* XI. fig. 9.

The first of these coins furnishes us with a curious inscription, which I believe is new, as I do not find it published either by De Luynes or Lang. I have shown it to Dr. Birch, who is inclined to read it Ki-ti-a-o (Kition?) although the last characters are doubtful. The legend of the second coin is probably Ba-si, the beginning of the word Basileôs. The third coin reads clearly on the obverse E-v-a, and on the reverse Ba-si-le-os, both retrograde, and is to be attributed to Evagoras I., King of Salamis, B.C. 410-375. For the readings of the Kypriote characters see Mr. George Smith's excellent article on this subject in the *Transactions of the Society of Biblical Archaeology*, part i. pp. 129-144. I may here mention that Mr. Hamilton Lang, late Consul at Larnaka, who has given much time and thought to the decipherment of the Kypriote alphabet, working independently, has arrived substantially at the same conclusions as Mr. Smith with regard to the reading of the legends of most frequent occurrence on this class of coins.

ATTALEIA, LYDIAE.

118. *Obv.*—Bust of Bacchante with ivy-wreath, right.

Rev.—ATTA Λ Ε ΑΤΩΝ. Satyr. naked, walking left, holding grapes and pedum. *Æ.* .65.

BAGIS, LYDIAE.

119. *Obv.*—ΙΕΡΑ ΒΟΥΛΗ. Female head laureate and veiled, right (the Senate).

Rev.—ΒΑΘΝΩΝ. River-god reclining, left, holding ears of corn and reeds; beneath, ΕΡΜΟΣ. *Æ.* .75.

This town, the name of which is Bagis, not Bagæ, was situated on the river Hermos, here personified.

DALDIS, LYDIÆ.

120. *Obv.*— . . . N CVN KAHTON. Bust of the Senate laureate, right.

Rev.—ΔΑΛΔΙ ΕΠΙ ΤΙ ΦΛΑΥ ΛΑ Φ . . KAICAP. Zeus standing, left, wearing long chiton and holding bird and sceptre. Æ. .7.

KAYSTRIANI, LYDIÆ.

121. *Obv.*—ΣΩΣΙΚΡΑΤΟΥ. Female head, right, laureate.

Rev.—[K]ΑΥΣΤΡΙ[Α]ΝΩΝ. Winged caduceus; in field, left, HT. Æ. .75.

MOSTENE, LYDIÆ.

122. *Obv.*—Head of Demeter veiled, right; behind, ear of corn.

Rev.—ΑΥΔΩΝ ΜΟΣΤΗ ΝΩΝ. Ear of corn; the whole in laurel-wreath. Æ. .6.

PHILADELPHIA, LYDIÆ.

123. *Obv.*—Bust of Artemis, right, wearing stephane and chiton fastened with a brooch on shoulder; behind her back, bow and quiver.

Rev.—ΦΙΛΑΔΕΛΦΕΩΝ ΕΡΜΙΗΙΟΣ ΑΡΧΙΕΡΕΥΣ. Apollo Musagetes standing, right, wearing long chiton, and holding lyre and plectrum. Æ. .85.

This town was named after Attalos II. (Philadelphos).

TABALA, LYDIÆ.

124. *Obv.*—ΔΗΜΟC. Head of Demos bearded, right, wearing diadem of beads; border of dots.

Rev.—ΤΑΒΑ ΑΕΩΝ. Artemis Ephesia with her usual supports, &c. Æ. .75.

Nothing is known of this city but from its coins, from some of which it would appear to have been situated on or near the river Hermos.

THYATIRA, LYDIÆ.

125. *Obv.*—ΙΕΡΑ ΕΥΝ ΚΑΗΤΟΛ. Bust of the Senate, right.

Rev.—ΕΠΙ ΕΤΡ ΜΟΕΧΙΑΝΟΥ ΘΥΑΤΕΙΡΗ ΝΩΝ. Female figure, naked to waist, recumbent, left,

under a tree, her left arm resting on a vase from which water flows; advancing to drink is a bull. Æ. 1·5.

Sestini (Descriz. di altre med. Gr. del Mus. Font., vol. iii. p. 74) supposes this type to represent Europa and Zeus in the form of a bull, but the whole pose of the figure seems to indicate either a river or the earth.

ÆZANI, PHRYGIÆ.

126. *Obv.*—ΔΗΜΟC. Bust of Demos, bearded and diademed, right.

Rev.—ΑΙΖΑΝΕΙΤΩΝ. Hekate Triformis, holding in her hands torches and daggers (?). Æ. ·65.

AMORION, PHRYGIÆ.

127. *Obv.*—ΑΜΟΠΙ ΑΝΩΝ. Head of Apollo, right, with lyre at his shoulders.

Rev.—ΕΠΙ ΟΡΕΤΟΡΟC ΑΝΤΩΝ ΟΥ. Artemis Ephesia with her usual supports. Æ. 1.

ANKYRA, PHRYGIÆ.

128. *Obv.*—ΘΕΑ ΡΩΜΗ. Bust of Roma, right, wearing modius; border of dots.

Rev.—ΑΝΚΥ ΠΑΝΩΝ. Dionysos, naked to waist, standing left, holding kantharos and thyrsos. Æ. ·65.

EUMENIA, PHRYGIÆ.

129. *Obv.*—Head of Zeus laureate, right.

Rev.—ΕΥΜΕ ΝΕΩΝ in wreath. Æ. ·65.

130. *Obv.*—ΕΥΜΕΝΕΩΝ ΔΗΜΟC. Head of Demos, right.

Rev.—ΓΛΑΥΚΟC. River Glaukos recumbent, left, holding ears of corn and reeds, at his side an urn from which water flows. Æ. ·75.

This river was a tributary of the Mæander (Pliny, v. 29).

FULVIA, PHRYGIÆ.

131. *Obv.*—Head of Fulvia, right, as Nike with wings on shoulders.

Rev.—[ΦΟΥΛ]ΟΥΙΑΝΩ[N] [Ζ]ΜΕΡΤΟΡΙΦΟ [ΦΙ]ΛΩΝΙ-
ΔΟΥ. Pallas, with spear and shield, advancing,
left. Æ. 65. Pl. XI. fig. 10.

This interesting coin is published by M. Waddington (*Voyage en Asie Mineure*, p. 149). The town of Fulvia is not mentioned by any ancient author; and as the name Zmertorix occurs on coins of Eumenia, struck under Augustus, it is probable that that city adopted the name of Fulvia in honour of the first wife of Mark Antony, whose portrait as Nike occurs on the coin under consideration. This is the opinion of the author of the *Catalogue of the Borrell Collection* (No. 457), in which M. Waddington concurs. It may be remarked that this portrait of Fulvia bears a striking resemblance to that of Kleopatra.

KOLOSSÆ, ΠΙΡΥΓΙÆ.

132. *Obv.*—Head of Serapis, wearing modius, right.

Rev.—ΚΟΛΟΧΗ ΝΩΝ. Isis standing, left, with lotus flower upon her head, holding sistrum in right, and circular object suspended by a string in left.
Æ. 7.

The name of this town, in many MSS., is spelt Kolassæ. Both forms are found in classical writers, but the coins read always Kolossæ.

ARMENIA.

Artaxias I. or his son.

133. *Obv.*—Head of king, right, bearded, wearing tiara surmounted by eagle.

Rev.—The king standing, right, with hands raised before a fire-altar, on the other side of which is a standard surmounted by an eagle; above the fire-altar floats the figure of Ormazd. Æ. 1; wt. 254 grs.
Pl. XII. fig. 1.

The series of coins to which this fine tetradrachm belongs is attributed to Artaxias, King of Armenia, or to his son. The chronology of these rulers of Armenia is somewhat obscure, but this coin may be placed, with little or no doubt, between 190 and 150 B.C. For the history, explanation of types, &c., &c., see Mr. Thomas's articles on the Early Armenian Coins, *Num. Chron.*, N.S., 1867, p. 237, *sqq.*

Artavazdes I.

134. *Obv.*—Head of Artavazdes, right, wearing tiara.

Rev. ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΑΡΤΑΥΑΖ[ΑΟΥ]. Quadriga, left, driven by the king who wears tiara and holds Nike in right and reins in left. In field mon. ⌘, and above horses' heads Ζ. *AR.* .7; wt. 56.8 (Langlois, Pl. III. No. 1).

Artavasdes succeeded his father, Tigranes, on the throne of Armenia, B.C. 36, and was beheaded by order of Kleopatra, B.C. 34.

SYRIA.

Seleukos I. (Nikator).

135. *Obv.*—Head of Bukophalos, harnessed, right.

Rev.—ΒΑΣΙΛΕΩΣ [Σ]ΕΛΕΥΚΟΥ. Anchor; in field, left, bunch of grapes. *AR.* .55; wt. 65 grs. Pl. XII. fig. 2.

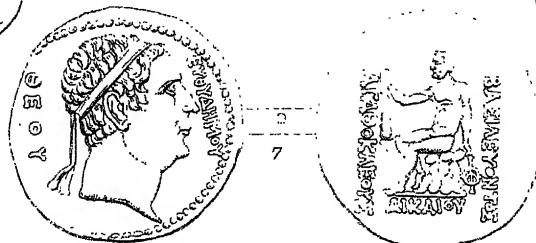
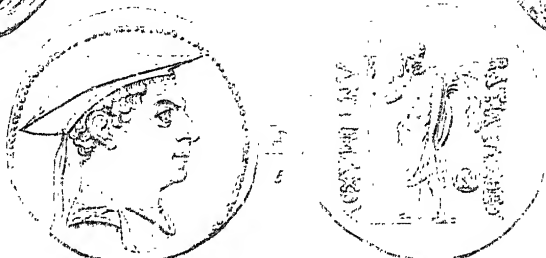
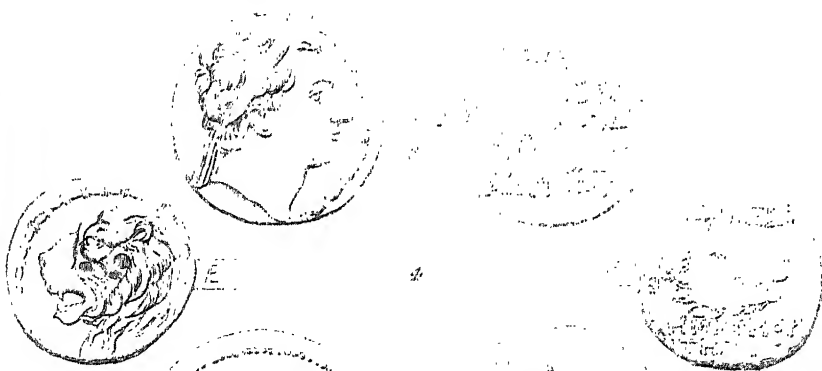
136. *Obv.*—Tripod, border of dots.

Rev.—ΒΑΣΙΛΕΩ[Σ] ΣΕΛΕΥΚ[ΟΥ]. Anchor, on either side of which Δ I. *AR.* .85; wt. 9.9 grs.



These two coins of Seleukos Nikator are of considerable rarity, and are not published in Gough's *Seleucidæ*.

Antiochos III., B.C. 223—187.

137. *Obv.*—Head of Antiochos III. diademed, right.



GREEK AUTONOMOUS FROM THE
COLLECTION.

Rev.—ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ. Elephant, right; in field, on either side the monograms  and . *Æ.* 1·15; wt. 262 grs. Pl. XII. fig. 3.

This splendid tetradrachm is of great rarity. The reverse furnishes us with an exception to the usual type of Apollo seated on the cithara.



DEMETRIOS I., SOTER.

138. *Obv.*—Head of lion, left, mouth open; usual Seleucid border.

Rev.—ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΣΩΤΗΡΟΣ. Boar's head, right; behind which vexillum or monogram. *Æ.* 1. Pl. XII. fig. 4.

LARISSA, SELEUCIDIS.

139. *Obv.*—Head of Zeus laureate, right; border of dots.

Rev.—ΛΑΡΙΣΑΙΩΝ ΤΗΣ ΙΕΡΑΣ. Throne, beneath which , and the date KΣ, 227 of the Seleucid era, B.C. 85. *Æ.* .75.

PHŒNICIA.

ORTHOSIA.

140. *Obv.*—Female head, right, turreted.

Rev.—[ΟΡΘ]ΟΣΙΕΩΝ. Terminal figure in a car drawn by two mythical animals or panthers? In the field, O Θ. *Æ.* .8.

A coin similar to this is published by Sestini (*Mus. Hederv.*, iii. p. 84).

PERSIA.

141. *Obv.*—BA. The king, as archer, kneeling right and drawing a bow; countermarked with a star.

Rev.—Incuse like the darics (?). *Æ.* .55.

142. *Obv.*—The king, as archer, kneeling, right, holding bow and sceptre over shoulder.

Rev.—Vexillum. *Æ.* .5.

These small copper coins belong to the last kings of the dynasty of the Achæmenidæ, when, from the increased intercourse with Greece, gold and silver no longer sufficed for the smaller exchange. The relation of copper to silver at this period was 60 : 1. (See Brandis, p. 235.)

BACTRIA.

Antimachos I., Theos.

143. *Obv.*—Diademed bust of king, right, wearing Macedonian kausia and chlamys, fastened over shoulder by a brooch; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ ΘΕΟΥ ΑΝΤΙΜΑΧΟΥ. Poseidon standing full-face, naked to waist, holding trident and palm. In field, right, mon. Ω. *AR.* 1·35; *wt.* 262·2 grs. *Pl.* XII. fig. 5.

A magnificent tetradrachm, the portrait full of expression.

Agathokles with Diodotos II., Soter.

144. *Obv.*—ΔΙΟΔΟΤΟΥ ΣΩΤΗΡΟΣ. Head of Diodotos, diademed, right.

Rev.—ΒΑΣΙΛΕΥΟΝΤΟΣ ΑΓΑΘΟΚΛΕΟΥΣ ΔΙΚΑΙΟΥ. Zeus naked, striding left, ægis on extended left arm, and thunderbolt in raised right; at his feet eagle, left; in front, wreath, and behind, monogram, Ω. *AR.* 1·25; *wt.* 263·5. *Pl.* XII. fig. 6.

With regard to the connection between the families of the various Greek rulers of Bactria, and for the position of Agathokles in respect to Diodotos and Euthydemos, conveyed by the word ΒΑΣΙΛΕΥΟΝΤΟΣ, see General Cunningham's papers on the Coins of Alexander's Successors in the East, in the NUMISMATIC CHRONICLE.

Agathokles, with Euthydemos.

145. *Obv.*—ΕΥΘΥΔΗΜΟΥ ΘΕΟΥ. Diademed head of Euthydemos to right, border of dots.



1



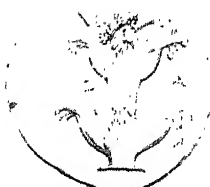
2



3



4



5



Rev.—ΒΑΣΙΛΕΥΟΝΤΟΣ ΑΓΑΘΟΚΛΕΟΥΣ ΔΙΚΑΙΟΥ.
Herakles, naked, seated on rocks, left, holding
in right club, which rests on a ledge, left
resting on rock; behind, mon. Φ. \mathcal{A} . 1·2;
wt. 261 grs. Pl. XII. fig. 7.

This unique tetradrachm was acquired by Mr. Wigan from the cabinet of Mr. Gibbs (Cunningham, Agathokles, No. 2).

EUKRATIDES, WITH HELIOKLES AND LAODIKE.

146. *Obv.*—ΒΑΣΙΛΕΥΣ ΜΕΓΑΣ ΕΥΚΡΑΤΙΔΗΣ. Bust of Eukratides helmeted, right.

Rev.—ΗΛΙΟΚΛΕΟΥΣ ΚΑΙ ΛΑΟΔΙΚΗΣ. Busts, jugate, of Heliokles and Laodike; behind, mon. \mathcal{A} . \mathcal{A} . 75; wt. 61 grs. Pl. XII. fig. 8.

This unique drachm is of the same type as a tetradrachm in General Cunningham's collection. It proves that Eukratides was the son of Heliokles and Laodike.

AFRICA.

EGYPT. ARSINOË II.

147. *Obv.*—Head of Arsinoë, right, wearing stephane and veil, over her left shoulder is the lotus-headed sceptre; border of dots.

Rev.—ΑΡΣΙΝΟΗΣ ΦΙΛΑΔΕΛΦΟΥ. Eagle, left, on thunderbolt, between his legs X. \mathcal{A} . 1·1; wt. 215·6. Pl. XIII. fig. 1.

This very rare piece belongs to the second wife and sister of Ptolemy Philadelphos.

EGYPT. PTOLEMY IV., Philopator. B.C. 222—205.

148. *Obv.*—Bust, draped, of king, diademed, right; border of dots.

Rev.—ΠΤΟΛΕΜΑΙΟΥ ΦΙΛΟΠΑΤΟΡΟΣ. Eagle, right, on thunderbolt; in front, \mathcal{N} ; border of dots. \mathcal{A} . 1·05; wt. 428·3. Pl. XIII. fig. 2.

Another specimen of this coin exists in the Bibliothèque Nationale at Paris.

KYRENE.

149. *Obv.*—^{K Y}
PAN Horseman, advancing left, wearing kausia,
which has fallen back, and chlamys, the whole
within plain circle surrounded by dotted one.
Rev.—⊙ E (Magistrate's name). Silphium, border same
as that on obverse. *Æ.* .55; wt. 66 grs. Pl. XIII.
fig. 3.

KYRENE.

150. *Obv.*—Head of Zeus Ammon, bearded and laureate, full-face turned slightly towards left; above his forehead is an ornament; the whole within a laurel-wreath.

^{V X}
Rev.—P A (Boustrophedon). Silphium. *Æ.* 1.1; wt.
A 1/1
203.7. Pl. XIII. fig. 4.

These two coins belong to the period of Kyrene's greatest prosperity, when the city was a free republic, and the arts were at their zenith (B.C. 450-322). The type of the first would seem to allude to the games. The head of Ammon on the silver coin is unique for the grandeur of its style and treatment. It is the only full face of Zeus Ammon which is known of this city.

BARKE.

151. *Obv.*—ΑΚΕΣΙΟΣ. Head of Zeus Ammon, full-face; border of dots between plain circles.
Rev.—ΝΟΙΑΝΘΑΣ. Three silphiums united in the centre, in the intervals are an owl, a chameleon, and a gerboa; same border as obverse. *Æ.* 1.05; wt. 198.2. Pl. XIII. fig. 5.

Barke was a republic during the same period as Kyrene, but the art of this coin is far inferior to that of the pre-

vious piece. M. Müller considers ΑΚΕΣΙΟΣ to be a Dorian genitive of ΑΚΕΣΙΑΣ, and that this name is that of a magistrate, and not, as has been suggested by Pinder, an epithet of Zeus Ammon. The chameleon and the gerboa (μὲν δέπρονς, Herod., iv. 192) are very common in Libya; the latter animal does not exist in Europe (Müller, Num. de l'anc. Afr., i. p. 95). The silphium plant, which occurs so frequently on the coins of Cyrenaica, no longer exists.³ From very ancient times, down to the Roman occupation of the province, it was a source of wealth to the country; and according to all accounts must have possessed extraordinary remedial properties. Müller (Num. de l'anc. Afrique, vol. i. p. 105) has so thoroughly described the nature of this wonderful plant that I cannot do better than refer those who would know more on this subject to his interesting account. With regard to the standard on which these tetradrachms of Kyrene and Barke are struck, see Müller, i. p. 118, and Brandis, p. 124, who says that the Attic standard was given up in Kyrene in the first half of the fifth century B.C., and the Samian system adopted, the tetradrachms of which range from 207 to 190 grains. This fact marks

³ A plant resembling the ancient silphium, but apparently not possessing the same qualities, was discovered in 1816 by the late Admiral W. H. Smyth, F.R.S., at Leptis Magna, and some roots were sent to this country. In commemoration of his researches in the Cyrenaica, an augmentation was granted to the armorial bearings of the Admiral, in which the silphium "proper" now appears. See Smyth's "Northumberland Catalogue," p. 88. Since this, another Englishman, named Falconer, has discovered in Northern Cashmir a plant which also bears a remarkable resemblance to the ancient Cyrenaic species. Nevertheless up to the present time the silphium, as it grew in ancient Cyrenaica, remains still undiscovered. (See also Num. Zeitsch., III. p. 480, where Falconer's plant is engraved.)

a close connection between Samos and Kyrene. Cf. Herod., iv. 162, who says that Arkesilaos III. fled to Samos, where he collected an army for his restoration to power in Kyrene. The earliest coins struck in Africa on the Samian standard are those inscribed with the names of Kyrene and Barke. Some of these would appear to have been struck before the expulsion of the Battiadæ, in B.C. 450 (Brandis, l. c.).

OEÆ, SYRTICÆ.

152. *Obv.*—Ægis, with head of Medusa winged, and with two serpents erect over brows; border of dots.

Rev.—Lyre and inscription Ν Ο 2 Ψ. Æ. .65.

This town was situated to the west of Leptis, near the modern Tripoli; it was probably of Libyan origin. For the reading of the inscription, see Müller, ii. 17. The ægis with the gorgon head was derived by the Greeks from Libya. Herod., iv. 189: τὴν δὲ ἄρα ἐσθῆτα καὶ τὰς αἰγίδας τῶν ἀγαλμάτων τῆς Ἀθηναίης ἐκ τῶν Λιβυσσέων ἐποιήσαντο οἱ Ἕλληνες. κ. τ. λ.

MACARÆA SYRTICÆ. Interregnum between Bocchus III. and Juba II., B.C. 33—25.

153. *Obv.*—Bust of Africa, right, wearing elephant's skin; behind, two spears; in front, the inscription
 Ι Ψ Χ Χ 1 Υ Ι 8 1 (הקנו הממלכת ?).

Rev.—Head of Janus, surmounted by a branch (?) and D. D. (Decreto Decurionum). Æ. .85.

This attribution and the reading of the legend are those of M. Müller (iii. p. 101).

TINGIS, MAURETANIÆ.

154. *Obv.*—Head of Baal, left, bearded.

Rev.—Ear of corn with legend * Λ Ι Ψ and C 6 0 3 (הגנא בעלה). Æ. 8.

Tingis (Tangiers) was an ancient city of Mauretania, said to have been founded by the giant Antæos, whose tomb and shield, of colossal size, were there preserved. Augustus conferred on this town the rights of Roman citizenship. Dion. Cass., xlviii. 48: τοῖς Τινγιτανοῖς πολιτεία ἐδόθη. For the reading of the Punic legends, see Müller, iii. 147, *sqq.*

BARCLAY V. HEAD.

P.S.—Since the above has been in type, I have received from Mr. Evans the following letter, addressed to him by M. Six of Amsterdam, which, as it contains some interesting remarks on certain doubtful or difficult pieces, published in the first portion of this article, as well as some rectifications of importance which may be added to those on p. 309, I append in full:—

AMSTERDAM, 22 Décembre, 1873.

CHER MONSIEUR,—Le dernier cahier du Numismatique Chronicle contient un article des plus intéressants de la main de votre collègue M. Barclay Vincent Head, sur les monnaies Grecques, dont le Musée Britannique s'est enrichi à la dispersion du célèbre cabinet Wigan. Beaucoup de ces monnaies ne présentent pas de difficultés à la classification, vu que le nom de la ville qui les fit frapper y est inscrit en toutes lettres, mais il y en a parmi le nombre, qu'il n'est pas aussi facile de reporter d'un seul coup à leur véritable place. Aussi M. Head s'est-il vu obligé d'ajouter parfois un signe de doute à ses attributions. Il ne sera donc, ce me semble, pas trop présomptueux de ma part, si je diffère parfois d'avis avec M. Head à l'égard du classement de quelques-unes de ces monnaies, la plupart sans nom de ville, et si je désire lui faire part de mes remarques, en preuve de l'intérêt que je prends à son travail.

Je tâcherai de les rendre aussi succinctes que possible et je commencerai par les attributions, à l'égard desquelles nous différons le plus, pour finir par quelques remarques de moindre importance.

No. 78. *Goresia*. Cette drachme de poids Attique n'est pas unique, il y avait un second exemplaire à la vente de la collection Whittall en 1867, qui est entré dans ma collection, où il est classé à *Etenna* de Pamphylic, parce que le même type des deux boxeurs, car ce ne sont pas des lutteurs, se retrouve, mais figuré d'une manière moins archaïque, sur un bronze d'*Etenna* d'une époque plus récente, voyez Mionnet, Suppl. vii., p. 39, n. 60, Catal. Allier, p. 94. Un bel exemplaire de ce bronze provenant aussi du Cabinet Wigan, est entré dans mes cartons. Du reste la manière dont le carré creux du revers est orné d'une bordure de perles entre deux filets, est je crois un indice, qu'il faut chercher la patrie de cette drachme dans le sud de l'Asie Mineur.

No. 77. Je ne m'explique pas pourquoi les monnaies au type de la grappe de raisin, que M. Head mentionne p. 120, sont attribuées à Carthaea. *Tenos* pourrait les revendiquer avec au moins autant de droit.

Quant au tétradrachme No. 77, dont un autre exemplaire a été gravé dans le Num. Chron. VI. 1866, pl. v. 4 et ailleurs, il me semble que M. de Prokesch-Osten y voit avec raison une pièce de fabrique Asiatique.

No. 65. *Heræa*. Des monnaies du même genre ont été trouvées à plusieurs reprises et en assez grand nombre à *Héraclée* de Bithynie, ainsi que l'assure M. Raoul-Rochette, Hercule Assyrien, p. 291,⁴ (v. pl. v., 1 à 4, et Cat. Behr. pl. i. n. 6, mal décrite p. 60). Cette observation rend

⁴ Extrait de la 2^{me} partie du Tome xvii. des Mémoires de l'Institut National de France. Paris, 1848.

l'attribution à Heraea au moins très-douteuse. Aussi M. Brandis, Münzw. in V. Asien, p. 388, ne l'a-t-il pas admise.

No. 29. Cette pièce ne peut pas être d'*Acanthus*, dont les monnaies sont de meilleur style. C'est plutôt une division d'un de ces décadrachmes, publiés par M. Newton (Travels in the Levant), et dont M. Brandis a donné la liste, pp. 528 et 529. La tête du taureau, qui regarde en arrière, est dessinée de la même manière que celle des bœufs, qui traient le char de Mercure, et le casque du revers se retrouve dans le champ des grandes pièces. *Δόκιμος* doit être un des successeurs de *Derronicus*, un de ces nombreux princes Thraces, dont les monnaies viennent de temps en temps nous révéler les noms. Son nom est remplacé sur un de mes exemplaires par la fleur, qui se voit sous le bœuf des grandes pièces, et au casque du revers est parfois substitué la triquète, qui forme le type du revers de la plupart des décadrachmes, v. Mus. Hunter, pl. 7, n. 20.

No. 48. *Delium* ? L'attribution de la série béotienne avec Δ—I à Delium a été combattue par M. Imhoof-Blumer dans le Numism. Zeitschrift de Vienne, 1871, t. III., p. 326 sq., avec des arguments si concluants, que je n'ai rien à y ajouter. Toutefois je n'irai pas chercher après une autre ville de Béotie, dont le nom commencerait par Δ I. Si ces monnaies ont été frappées dans quelque temple, ce doit avoir été, d'après les types, un temple de *Dionysos*, et ce n'est qu'à Thèbes même que je voudrais chercher le lieu d'émission, tant ces pièces sont de même style que la série anépigraphe aux mêmes types, qu'il faut bien laisser à la capitale des Béotiens.

No. 49. Le bronze d'*Erchomenos* est malheureusement d'une conservation trop imparfaite, pour que M. Head ait

pu reconnaître le véritable sens de la scène qui y est figurée. Un exemplaire un peu plus distinct a été publié par M. Friedländer dans les *Denkmäler u. Forschungen* de Gerhard, 1864, pl. 183, n. 4, p. 133 et dans les *Berliner Blätter*, 1868, IV., pl. 45, n. 3, p. 141, et une variante dans les *Denkm. u. Forsch.* 1872, p. 79, vign. On y distingue très-bien la flèche, qui lancée par Artemis vient percer le sein de la fille de Niobé et aussi la légende EPXOMENION.





No. 23. *Rhegium*. Les deux petites figures au-dessus des paupières du lion sont, si j'ai bien vu des roues de forme archaïque, symbole solaire comme le lion l'est lui-même.

No. 24. Les types des monnaies de la ville, dont le nom commence par *Ser*, sont à tel point identiques avec ceux de plusieurs des bronzes de Néapolis de Peucétie, entre autres avec celui qui est décrit sous le n. 9, et le nom même de Néapolis, indique si bien que cette ville a remplacé une colonie Grecque plus ancienne, dont le nom s'est perdu, que j'oserais presque proposer de voir dans l'épigraphie MEΡ les restes de ce nom. *Polignano*, l'ancienne Néapolis, n'est pas trop éloigné de Tarente, pour qu'il faille hésiter à croire que l'influence Grecque se soit étendue jusque là au commencement du 5^{me} siècle, et sa position aux frontières de la Calabre s'accorde bien avec le fait, qu'une des rares monnaies de *Ser* s'est rencontrée en Calabre dans le dépôt décrit par M. Sambon, 2 éd. p. 34.

No. 61. *Lacedaemon*. Ce tétradrachme a fait le sujet d'une dissertation spéciale de M. F. Bompais, dans laquelle ce numismatiste distingué tâche de prouver, que ce n'est pas Cléomène III., mais Antigone Doson, dont le portrait se voit au droit de cette monnaie curieuse. Sans vouloir décider cette question, je dois avouer, que la

chèvre, placée à côté de l'Apollon Amycléen, me fait pencher pour le Roi de Macédoine.

No. 67. *Mantinée*. Il est remarquable, qu'une division de cette pièce remplace la tête casquée *barbue* par une tête casquée *imberbe* et qui paraît féminine sur mon exemplaire, v. Fox, Uned. Coins, I., pl. x., n. 103.

No. 89. *Roi de Pergame*. Il n'est pas trop difficile de classer les tétradrachmes des Rois de Pergame dans un ordre assez logique, si on tient grand compte de la dégradation graduelle du style de la Pallas assise du revers. Dans les premiers temps le manteau couvre la robe jusqu'aux pieds, et la robe n'est indiquée que par quelques grand plis entre le manteau et la ceinture. Plus tard et c'est précisément sur mes deux exemplaires avec  ou  et , que je le constate, le bord inférieur de la robe commence à se montrer sous le manteau et les plis de la robe sont nombreux et symétriques. Enfin, ces petits plis sont de plus en plus visibles et exagérés sur les tétradrachmes, qui portent dans le champ le monogramme  et l'abeille d'Ephèse. L'émission de ces dernières pièces est postérieur à 188 av. notre ère, car c'est alors qu'après la défaite d'Antiochus III. à Magnésie, Ephèse fut jointe au royaume de Pergame. Il me semble qu'il est permis de les attribuer à la fin du règne d'Eumène II. Toutes ces pièces ont au droit une tête, qui malgré quelques différences d'expression, comme il doit s'en produire pendant un long règne de plus de quarante ans, paraît bien être toujours celle d'Eumène. Tout au commencement de son règne, je place les tétradrachmes sur lesquels la tête est simplement diadémée, et sans la couronne de laurier, qui peut avoir été ajoutée après la victoire de Magnésie. Bientôt le type du revers subit une modification, et Pallas, qui tenait le bouclier devant elle, couronne dès lors le nom

de Philétaire. A Attale I., qui le premier ceignit le diadème en 239, il faut donner les monnaies de beau style, qui offrent la tête très-caractéristique, gravée dans les *Denkmäler u. Forschung.* de Gerhard. 1867, pl. 218, n. 3, 4, et par Mionnet, *Recueil*, pl. 75, n. 5. Sous les deux derniers rois, au contraire, on a continué, à ce qu'il paraît, les émissions aux types et la tête d'Eumène II., sans y faire de notables changements.

Probablement le Musée Britannique renferme des tétradrachmes différents de ceux que je possède, et de ceux qui ont été publiés, et avant de les connaître, il serait téméraire de se prononcer d'une façon décisive, mais pourtant je doute qu'ils ébranleront le résultat auquel je suis arrivé, et qui consiste à attribuer au milieu environ du règne d'Eumène II. le tétradrachme décrit par M. Head.

Philétaire n'a jamais porté le diadème, il est donc presque superflu de constater, que je ne puis voir son portrait dans la tête, qui porte la couronne de laurier enlacée par un diadème royal. Il est probable qu'Eumène ménageait la susceptibilité de ses amis les Romains, qui n'aimaient ni les rois, ni les diadèmes, et que pour cette cause il omettait de mettre son nom et son titre de roi, et cachait son diadème à moitié sous la couronne de laurier. Attale I. en avait déjà agit de même par égard pour Antiochus, dont le nom se lit même sur son premier tétradrachme.

Ces quelques détails sur la numismatique des rois de Pergame vous paraîtront déjà beaucoup trop longs, cher Monsieur, aussi est-il bien temps que j'en finisse, en vous priant d'accepter toutes mes excuses de vous avoir entretenu si amplement d'un sujet qui ne doit pas vous intéresser.

Agréez, cher Monsieur, l'assurance de mes sentiments les plus distingués.

J. P. SIX.

XVI.

A DINAR OF SALIH EBN MERDAS OF ALEPPO.

To the Editor of the Numismatic Chronicle.

CAIRO, April 9th, 1873.

SIR,—

I transcribe herewith a very able letter from my learned friend Monsieur H. Sauvaire, Acting French Consul in Cairo, which I am sure will be read with great interest by all students of Oriental Numismatics;

and remain, Sir, your obedient servant,

E. T. ROGERS.

CAIRE, le 30 Mars, 1873.

A MONSIEUR ROGERS,

Consul de S. M. Britannique au Caire,

Mon cher Ami,—

“J’ai le plaisir de vous communiquer les quelques recherches que j’ai faites sur l’intéressant dinâr Merdasite de votre collection. Cette pièce dont le diamètre est de 22 millimètres, pèse 4·2 grs. (English measure and weight 0·86 inch, 64·8 grains.—E. T. R.).

En voici d’abord la description.

P. I. Au centre, un petit cercle; au milieu un point, et au dessous du point الله “Dieu.” Autour, l’inscription suivante renfermée dans un cercle الامام الظاهر لاعزاز دين الله اميرالمو “L’Imâm ez Zâher lé’izâz dîn illâh Emîr el Mou” pour el Moumenîn. La place a manqué pour l’achèvement du mot. Dans un troisième cercle l’inscription circulaire الامير ابو علوان ثمال بن الامير اسد الدولة “L’Emîr Abou ’Olouân Temâl fils de l’Emîr Asad ed

daula." Et tout autour de ce troisième cercle, la mission prophétique depuis محمد رسول الله ارسله بالهدى jusqu'à المشركون

P. II. Au centre d'un petit cercle, un point. Tout autour, circonscrite par un second cercle, la profession de foi chiïte. ولي الله لا اله الا الله محمد رسول الله على و "Il n'y a dieu que Dieu, Mahomet est l'envoyé de Dieu, Ali est l'ami de Dieu." Comme à l'avvers l'inscription est restée inachevée faute d'espace. Autour du 2^{me} cercle je lis الامير اسد الدولة و مقرها و ناصحها ابو علي صالح بن مرداس¹ "L'Emir Asad ed daula (le lion de l'Empire) son consolidateur et son bon conseiller Abou 'Ali Sâlih fils de Merdâs." Cette inscription se trouve circonscrite dans un troisième cercle autour duquel il y a بسم الله ضرب "Au nom de Dieu ce dinâr a été frappé en la ville d'Alep l'année 417" (A.D. 1026).

On sait que le Khalife Fathémite d'Egypte, Ez Zâher lé 'izâz dîn illâh régna de l'an 411 à l'an 427 de l'hégire (A.D. 1020-1035).

Asad ed Daula Abou Ali Sâlih Ebn Merdâs le Kelâbite, appartenait à la tribu des Arabes bedouins les "Benou Kelâb," ainsi appelés du nom de leur ancêtre Kélâb fils de Rabi'a et neveu de Nomeyr² né en l'année 447 de J. C. (cf. Caussin de Perceval, Tab. viii.).

Ebn Khallikân (T. i. p. 321, du texte publié par M. de Slane, et vol. i. p. 631, de la traduction anglaise de ce savant) nous donne la biographie d'Asad ed daula; mais

¹ Les mots بن مرداس sont tracés en très-petits caractères. On dirait même qu'il y a seulement par abréviation بمرداس.

² Les Benou Nomeyr ou Nomeyrites étaient comme les Kelâbites une puissante tribu Arabe.



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ANTOTYPE LONDON

outre Ebn Khallikân et D'Herbelot (aux mots Mardas Saleh, p. 564, et Assad ed doulet, p. 122), le Kâmil d'Ebn el Athir (ed Tornberg, T. ix. et x.); deux manuscrits de ma collection, le premier sans titre ni nom d'auteur, et le second d'El aïny, et enfin le Tarikh Monneddjim Bachi (ed. de C. P., t. ii. p. 519), m'ont fourni sur la dynastie dont votre pièce est le premier monument numismatique connu les indications que je vais resumer ici.³

La dynastie des Merdasites d'Alep commença à régner dans cette ville en l'année 414 et prit fin en l'année 472.

Sâleh ebn Merdâs, dès l'année 402, avait eu des démêlés avec Abou Nasr Ebn Loulou Mourtadha ed daula, qui était seigneur d'Alep sous la suzeraineté du Khalife Fathémite El Hâkem be amr illâh. Celui qui fit frapper plus tard la jolie monnaie qui orne votre riche collection, n'était autre qu'un chef de brigands et se livrait à la tête de sa tribu à toutes sortes de rapines. C'est encore le même genre de vie que mènent aujourd'hui, comme vous le savez, les Arabes bedouins qui ont pu jusqu'à présent échapper au joug de l'autorité.

Abou Nasr, qui n'osait pas sans doute poursuivre Sâleh au fond de ses déserts, eut recours à une ruse dont l'histoire contemporaine de l'Orient nous fournit encore plus d'un exemple. Il attira dans la ville le fils de Merdâs et ses cavaliers et les fit ainsi prisonniers. Sâleh fut jeté en prison; mai il parvint bientôt à se sauver en se précipitant du haut de la citadelle où il était enfermé. Après s'être caché dans un conduit d'eau pour échapper aux poursuites dirigées contre lui, il parvint en se trainant, les fers aux pieds, à un village où il fut reconnu par des Arabes qui

³ On trouverait sans doute des renseignements plus complets dans l'histoire d'Alep de Kemal ed din ainsi que dans celle de Ebn el Adin.

le conduisirent auprès de sa tribu.⁴ Sâleh ayant réuni deux mille cavaliers marcha sur Alep qu'il assiégea durant trente-deux jours. Abou Nasr fut vaincu dans une sortie et chargé des mêmes fers qui avaient servi à son ancien captif, aujourd'hui son vainqueur. Cependant sur les conseils de sa mère, Sâleh après avoir donné la liberté à Abou Nasr, renvoya les otages que ce dernier avait remis entre ses mains. Abou Nasr reconnaissant lui paya un tribut double de celui qu'il lui avait promis.

Quelque temps après Abou Nasr fut chassé d'Alep et cette ville passa successivement sous l'autorité de différents gouverneurs qui exerçaient le pouvoir au nom des Khalifes Fathémides d'Egypte.

Ebn Ta'bân, l'un d'eux, avait irrité les habitants par ses vexations quand ceux-ci en 414 se revoltèrent contre lui et livrèrent la ville à Sâleh. Ebn Ta'bân se réfugia dans la citadelle; mais bientôt l'eau ayant manqué, la milice remit la citadelle au fils de Merdâs qui devint en cette année le maître de tout le territoire depuis Baalbek jusqu'à 'Ana.

Sâleh demeura à Alep pendant six ans.

C'est durant cette période qu'a été frappé votre précieux dinâr qui nous apprend que Saleh Ebn Merdâs avait associé au pouvoir son fils Abou 'Olouân Témâl qui prit plus tard le titre honorifique de Mo'ezz ed daula (l'exaltateur de l'empire).

En l'an 420 le suzerain Ez Zâher lé'izâz dîn illâh mécontent de son vassal, expédia contre lui un corps de troupes sous le commandement d'Anouchtekin el Barbari. Saleh et Hassan émir des benou They se réunirent pour livrer bataille au général de l'armée Egyptienne. On en vint aux mains à Oqhouâna أقحوان sur le Jourdain près de Tibériade. Mais Sâleh Ebn Merdâs et son plus jeune

⁴ A Meurdj Dâbeq.

filis furent tués et leurs têtes envoyées au Caire. Un autre de ses fils Abou Kâmel Nasr Ebn Sâleh se sauva, vint à Alep et s'empara de cette ville. Son titre honorifique était Chebl ed daula (le lionceau de l'empire).

Chebl ed daula après avoir remporté quelques succès sur les Grecs, alors maîtres d'Antioche demeura souverain absolu d'Alep jusqu'à en 429, époque à laquelle il fut tué par Ed dezberi commandant des troupes Egyptiennes, dans une bataille que lui livra près de Hama ce général d'El Mostanser billah.

Ed dezberi s'empara alors d'Alep (ramadan, 429) et de toute la Syrie. Les Egyptiens ayant appris qu'il se disposait à se révolter envoyèrent l'ordre aux habitants de Damas de ne plus reconnaître son autorité. Ed dezberi quitta cette ville et se dirigea vers Alep au mois de Rabiâ 2nd de l'an 433; il mourut un mois après.

A la nouvelle de la mort d'Ed dezberi, Abou 'Olouân Témâl qui se trouvait à Er Rahbé, s'empressa de revenir à Alep qui lui fut livrée par les habitants; au mois de Safar de l'an 434 la citadelle lui fut également livrée après onze mois de siège par la veuve et les troupes d'Ed dezberi.

En 440 et 441 Abou 'Olouân Témâl eut à se défendre successivement contre Abou 'Abd allâh Ebn Nâser ed daula Ebn Hamdân, et contre l'eunuque Refq qui avaient été envoyés contre lui par le Khalife d'Egypte. Le premier mit les Alepins en déroute, mais Refq fut défait et demeura prisonnier.

Quelques temps après ces évènements Mo'ezz ed daula fit la paix avec les Egyptiens et leur abandonna Alep où ils envoyèrent en 449, avec le titre honorifique de Makîn ed daula, Abou 'Ali el hasan Ebn 'Ali Ebn Molhem. Témâl partit pour l'Egypte et son frère Abou Douaba 'Atiyya prit la route d'Er Rahbé.

En 452, Mahmoud, fils de Chebl ed daula, après avoir défait à El Ghoneydeq le commandant des troupes égyptiennes, Nâser ed daula Abou 'Ali ebn Nâser ed daula obn Hamdân, marcha sur Alep dont il s'empara ainsi que de la citadelle. Les Egyptiens envoyèrent contre lui son oncle Mo'ezz ed daula Témâl. Mahmoud appela à son secours son oncle maternel Mani' Ebn Chabîb Ebn Watâb le Nomeyrite seigneur de Harrân. Témâl leva le siège et se retira dans le désert au mois de Moharram, 453; Mani' retourna à Harrân.

Témâl revint bientôt à Alep. Son neveu étant sorti de la ville pour le combattre fut défait et se refugia auprès des Benou Nomeyr à Harran. Témâl prit livraison d'Alep dans le mois de Rabi' 1^{er}. Après avoir conduit une expédition victorieuse contre les Grecs, ce prince mourut dans cette ville au mois de dou'l qâdî de l'an 454.⁵ Il était doux et généreux. Il légua Alep à son frère 'Atiyya qui fut peu de temps après depouillé du pouvoir par son neveu Rachid ed daula Mahmoud. 'Atiyya s'empara alors d'er Raqqa. Cette ville lui ayant été enlevée en 463 par Charaf ed daula Moslem Ebn Qoreych, il se réfugia à Constantinople, où il mourut en 465.

Mahmoud mourut en 468. Son fils aîné Djelal ed daula Samsam ed daula Abou'l Mozaffar Naser fut porté par les troupes au trône d'Alep. Il enleva aux Grecs la ville de Manbedj. Mais adonné à la boisson, il fut la même année tué par un Turkoman, et eut pour successeur son frère Chebib ou Sabeq qui avait d'abord été désigné par son père pour lui succéder.

Chebîb, aussi appelé Mouchib par quelques auteurs,

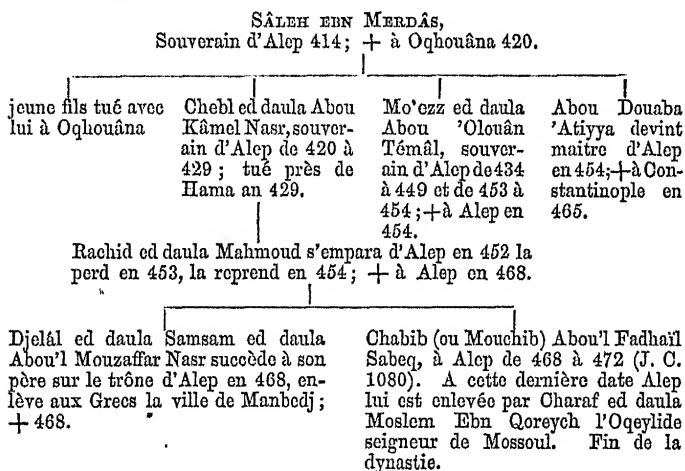
⁵ Suivant Ebn el Athîr sub anno 452 Mo'ezz ed daula fut tué par son neveu Mahmoud dans un combat qu'ils se livrèrent hors d'Alep à El Fouweydeq.

conserva la souveraineté d'Alep jusqu'à l'an 472 (J. C. 1079), époque à laquelle cette ville fut prise par Charaf ed daula Moslem Ebn Qoreych, l'Oqeïlde seigneur de Mossoul. Avec Chebib prit fin la dynastie des Merdasides d'Alep qui avait duré cinquante-huit ans.

D'après Ebn Khallikan Merdâs signifie "une pierre que l'on jette dans un puits pour savoir s'il y a de l'eau ou non."

Les Benou Merdâs ont été célébrés par le poète Abou'l Fetyan Mohammed, connu sous le nom d'Ebn Hayous dont on lit la biographie dans le vol. iii. de la traduction anglaise d'Ebn Khallikan par M. de Slane.

J'ajoute ici le tableau généalogique de la dynastie des Merdasides.



Veuillez agréer mon cher ami l'expression de mes sentiments les plus affectueux et les plus dévoués.

(Signed) HY. SAUVAIRE.

XVII.

ON THE COINS OF THE URTUĞIS—continued.

I. In The British Museum—continued.

C. URTUĞIS OF MĀRIDĪN.

II. ḤOSĀM-ED-DĪN TIMURTĀSH. 516-547. 1122.₃—1152.₃.

No.	Weight.	Diameter.	Date. A.H.	Edited or Inedited.	Description.
49 Æ	12.3	VIII	516-47	Frachn, <i>Rec.</i> Cl. XIII. 1. Castigl., CLII. Barthélemy <i>Mém de</i> <i>l'Acad. des</i> <i>Inscr. et</i> <i>B.-Lett.</i> T. xxvi. (1753) p. 560. no. 2.	Type I. 1. I. Head to right. [Copied from coin of Antiochus VII.] II. إيل غازي الملك العالم العادل حسا م الدين Below, fleuron.
50 Æ					2. Same.
51 Æ					3. Same: but counterstamp, upside-down, upon the neck, نجم الدين.
52 Æ				Marsden, CII.	4. Same as (3), with the addition of ∴ over the العالم م.

III. NEJM-ED-DĪN ALPĪ. 547-572. 1152.₃-1176.₇.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
53 Æ			547?	Frachn, <i>Rec.</i> Cl. XIII. 3. Castigl., CLIII. [Reiske, <i>Rep.</i> xi. 20.]	<p>Type I. .</p> <p>1.</p> <p>I. Head as on preceding coins of Timurtāsh ; on neck نجم الدين, but not upside-down, and not as a counterstamp, there being no sign of the edge of the punch, such as is seen on the last two coins of Timurtāsh.</p> <p>II.</p> <p>إيل غازى</p> <p>ملک الأمراء</p> <p>أبو المظفر</p> <p>ألبى بن</p>
54 Æ					<p>2.</p> <p>Same.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
55 Æ				Marsden, ciii. Castigl., cliv.	<p>3. . Same: but, on the cheek, (shown by square edge of the punch,) counterstamp, (stamped upon the name on the neck,)</p> <p>نجم الدین ملک دیاربکر</p>
56 Æ					<p>4. Same as (3).</p> <p>It is evident that Nejm-ed-din at first used his father's coins, merely counterstamping them with his own name (nos. 51, 52). When it became necessary to coin fresh money, he struck coins of the same type as those which he had been using; but he altered the reverse, by substituting his own name and titles for those of Timurtāsh; and he also incorporated into the die of the obverse his own name, which before had been only counterstamped (nos. 53, 54). He then appears to have made some acquisition to his territory, and to have commemorated the accession by putting on his coins a counterstamp which gives him the title of <i>King of Diyar-bekr</i> (nos. 55, 56). After this he used other types than that of Timurtāsh.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
57 Æ	14.9	IX		Frachn, <i>Rec.</i> Cl. XIII. 4. Castigl., civ. Barthélemy l. c. p. 561; no. 3.	Type II. 1. نجم الدين I. Two busts, diademed, face to face. [Copied from coin of Gratian and Valentinian II.] ملك ديار بكر II. بن Two figures standing, facing. [Copied from coin of John II. Comnenus, re- presenting the aureo- late Virgin crowning the Emperor standing on her right, his right hand on his breast, his left holding the cross- bearing orb.] أرتق 2. Same: but أرتق instead of أرتق. 3. Same as (2). A distinction between these three coins is to be observed: the first represents the cross (on the orb) by three dots ∴, the second by two ∴, the third by one. I have put this type before the next type, because I consider its simpler arrangement of the inscrip- tions, and their shortness, as indica- tions of an earlier date.
58 Æ				Marsden, civ.	
59 Æ					

No.	Weight.	Diameter.	Dato.	Edited or Inedited.	Description.
60 Æ	13·5	IX	558	[Castigl., CLVII.]	Type III. 1. I. A. Head, diademed, facing. M. الملك العالم العادل نجم الدين ملك ديار بكر II. A. Bust, crowned, facing. [The dress seems to be Byzantine.] M. أبو المظفر ألبى تمر تاش بن إيل غازى بن أرتق ثمان Within M., to left of head, وخمسين. To right, وخمسمائة.
61 Æ				Reiske, Rep. xi. 19. Marsden, cv.	2. Same: but II. M. أبو المظفر ألبى بن تمر تاش بن إيل غازى بن أرتق سنة To right of head, ثمان وخمسين To left, وخمسمائة
62 Æ				Fraehn, Rec. Cl. XIII. 2.	3. Same as (2): but وخمسمائة and ثمان وخمسين are transposed and سنة omitted.
63 Æ Silvered. 64 Æ			559	Inedited.	4. Same as (3). 5. Same as (3): but ثمان is substituted for تسع and سنة inserted.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
65 Æ	14.2	IX	555-6	Fraehn, <i>Rec.</i> CL. XIII. 4a. Castigl., CLVI. [Adler, <i>Coll. Nov.</i> LXV.] Marsden, CVI.	Type IV. 1. I. لا إله إلا الله Two heads facing, slightly turned away one from the other. [A common Byzantine type.] المستجد بالله أَمِيرَ الْمُؤْمِنِينَ مُحَمَّدَ رَسُولَ اللَّهِ
66 Æ					II. نجم الدين Head facing, crowned; within small circle of dots. أَلِيبَى بْنِ إِيلِ غَازَى ملك ديار بكر
67 Æ					2. Same.
68 Æ					3. Same.
69 Æ			556-72		4. Same: except that المستجد بالله and أَمِيرَ الْمُؤْمِنِينَ have changed places. The occurrence of the name of the Khalifeh El-Mustenjid limits the date to 555-6.
70 Æ				Marsden, CVII.	5. Same as (1): but المستضي is substituted for المستجد بالله and أَمِيرَ الْمُؤْمِنِينَ for بَأَمْرِ اللَّهِ. 6. Same as (4): but المستضي is substituted for المستجد بالله and أَمِيرَ الْمُؤْمِنِينَ for بَأَمْرِ اللَّهِ.

IV. KUTB-ED-DĪN ĪL-GHĀZĪ II. 572-580. 1176.7-1184.5.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
71 Æ	11.5	IX	577	Marsden, CVIII. Frachn, <i>Rec.</i> Cl. XIII. 5. Barthélemy <i>l.c.</i> p. 563, 5 Cf. Soret, <i>Rev. Num.</i> <i>Belge</i> , 2nde Série, iv. 399; and Karabacek, <i>Num. Zeit.</i> Bd. i. 1869.	<p>Type I.</p> <p>1.</p> <p>I. سبع وسبعين خمس مائة</p> <p>Two busts, diademed, facing; one larger than the other. [Copied from coin of Herak- lius I. and his son Heraklius Constantinus; but the Em- peror's beard has been shaved, and the diadems have been much altered.]</p> <p>II.</p> <p>قطب الدين بن الناصر للدين أمير المؤمنين هذا الدرهم ملعون من يعتيره</p>
72 Æ			578	Pietrasz., 262.	<p>2.</p> <p>Same: but سبع instead of ثمان, and خمس inserted before</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
73 Æ			579	[Castigl., CLIX.] [Adlor, <i>Coll. Nov.</i> LXVII.]	3. Same as (1): but سبع instead of تسع, and , omitted after تسع.
74 Æ			580	Inedited.	4. Same as (1): but ثمانين وخمس مائة instead of سبع وسبعين خمس مائة.
75 Æ			578 or ? 587	[Castigl., CLXIII.]	5. Same as (1): but سبع وثمان وخمس مائة instead of سبع وسبعين خمس مائة (سبعين = سبع or ثمانين = ثمان) and the unit and decimal are trans- posed ?)
76 Æ			579?	Inedited.	6. Same as (1): but ستة تسع تسعين وخمس مائة instead of سبع وسبعين خمس مائة (سبعين = تسعين)

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
77 Æ	10.9	IX		Marsden, CXI. Adler, <i>Coll. Nov.</i> LXVI. Castigl., CLVIII. Frachn, <i>Rec.</i> Cl. XIII. 6. Stickel, <i>Zeitschr.</i> <i>D.M.G.</i> xii. 326. Scott, <i>Rev. Arch.</i> 1st Ser. x. 295.	<p>Type II.</p> <p>1.</p> <p>I. بن ألي بن</p> <p>Within dotted square, head to right, diademed. [Copied from coin of Constantine I.]</p> <p>تمرتاش بن</p> <p>II. إيل غازی</p> <p>لمولانا المالك العالم</p> <p>العادل قطب الدين</p> <p>ملك الأمراء شاه</p> <p>ديار بكر</p> <p>2.</p> <p>Same.</p> <p>3.</p> <p>Same.</p> <p>4.</p> <p>Same: in part double-struck.</p> <p>5.</p> <p>Same: in part double-struck.</p> <p>6.</p> <p>Same as (1): but المالك instead of لمالك, for الملك.</p> <p>The unusual form [<i>Belonging</i>] to our lord the king, the assemblage of titles, and other peculiarities, in- duce the opinion that these coins were struck by some governor or chieftain tributary to the Urtuqi Kutb-ed-din.</p>
78 Æ					
79 Æ					
80 Æ					
81 Æ					
82 Æ					

V. ḤOSĀM-ED-DĪN YÜLUK-ARSLĀN. 580-597. 1184_g.-1200₁.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
83 Æ Silvered.	13.4	IX	581	[Castigl., CXXI.] [Reisko, Rep.xi.10]	<p>Type I.</p> <p>1.</p> <p>I. Half-figure, right hand on breast.</p> <p>[Copied from coin of Artavasdes and Nikephorus; but the robe is fastened in front, whereas the Byzantine is fastened on the right shoulder.]</p> <p>II. Within hexagram of dotted lines :</p> <p>ب أيو</p> <p>الملك الناصر صلاح الدنيا والدين يوسف بن</p> <p>Between hexagram and outer dotted circle :</p> <p>ضرب سنة | أحد | ثمانين | خمسا | مائة</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
84 Æ <i>Sil- vered.</i>					2. Same.
85 Æ				Marsden, cxii.	3 Same: but different obv. inscription, and differently divided: حسام الدين يو لق بن ايل غازى
86 Æ			583	Fraehn, <i>Rec.</i> Cl. xiii. 7.	4. Same as (1): but أَحَد instead of ثَلَاث.
87 Æ			584	Inedited.	5. Same as (1): but أَحَد instead of أَرْبَع.
88 Æ					6. Same as (5).
89 Æ			585	Marsden, cxiv.	7. Same as (1): but أَحَد instead of خَمْس.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
90 Æ	13.5	IX	580-9	Fraehn, <i>Rec.</i> Cl. XIII. 8. [Adler, <i>Coll. Nov.</i> LXVIII.] [Castigl., CLX.]	Type II. 1. حسام الدين ملك ديار بكر Two heads: that on the right, profile to left; that on the left, smaller, nearly facing, crowned. [The profile is probably copied from a coin of Nero: but the head on the left is clearly Byzantine. Apparently a mixed type.] II. الملك الناصر صلاح الدين محمي دولة أمير المؤمنين Above, fleuron. 2. Same: but without fleuron. 3.. Same as (2): but above pellet. 4. Same as (2): but بن أيوب and يوسف are transposed. The accession of Yülük-Arslān and the death of Ṣalāḥ-ed-dīn limit the period during which these coins could have been struck to 580-589.
91 Æ				Barthélemy <i>l. c.</i> p. 572, no. 17.	
92 Æ <i>gilt.</i>				[Reiske, <i>Rep.</i> xi. 20]	
93 Æ					

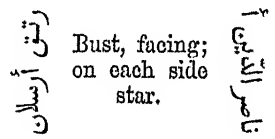
No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
94 Æ	11.5	IX	589	Fraehn, <i>Rec.</i> Cl. XIII. 9. a. [Reiske, <i>Rep.</i> xi. 15]	<p>Type III.</p> <p>1.</p> <p>I. Four full figures: one is seated in the midst, with head dejected; behind stands another, with face in profile, and right arm upraised; two other figures stand one on each side of the sitting one, the figure on the left with arms raised, that on the right with arms down.</p> <p>II. A. الإمام النا صر للدين أمير المؤمنين</p> <p>M. حسام الدين ملك ديار بكر يولق أرسلان بن إيل غازي بن أ[ر]تق تسع وثمانين وخمسمائة</p>
95 Æ				Marsden, cxv. Castigl., CLXII. Barthélemy l. c. p. 567, no. 14.	<p>2.</p> <p>Same :</p> <p>but a star before the sitting figure; and تسع سنة before ر أرتق inserted in.</p>
96 Æ				Scott, <i>Rev. Arch.</i> x. 296-7.	<p>3.</p> <p>Same as (2):</p> <p>but no star; annulets, one on each side and one a-top of the inscription in II. A.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
97 Æ			589	Marsden, CXVII. [Adler, <i>Mus.</i> C.B.V. XXXVI.] Frachn, <i>Rec.</i> Cl. XIII. 9. Scott, <i>Rev. Arch.</i> x. 297.	4. I. Same as (3): but no annulets, and slight alterations in the figures, drapery being added. II. A. الملك العادل الإمام النسا صرالدين أمير المؤمنين سيف الدين Below, fleuron. M. Same as M. of (2).
98 Æ				Inedited.	5. Same as (4): but on I. countermark (inverted) GG.
99 Æ <i>Sil- vered.</i>					6. Same as (4): but no fleuron on II. A.
100 Æ			590	Inedited.	7. Same as (5): but date تسعين وخمسمائة.
101 Æ					8. Same as (7): but a pellet under II. A.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
102 Æ	14.3	IX	596	Frachn, <i>Nov. Supp.</i> Cl. XIII. 9. bb.	<p>Type IV.</p> <p>1.</p> <p>I. Helmeted figure, seated cross-legged; holding, in right hand, sword horizontally behind his head; in left hand, a trunkless, helmeted, head, by the plume; handle of sword crossed, tasselled. To the left is a stem with three flowers or buds. Beneath figure, fleuron.</p> <p>II. A. الناصر لدين الله أمير المؤمنين</p> <p>M. (Inner). الملك الأفضل على والملك الظاهر غازي بن الملك الناصر (Outer). حسام الدين يولق أرسلان إيل غازي بن [أ] رتق ضرب سنة ست وتسعين وخمائة (خمسمائة = خمائة).</p> <p>2.</p> <p>Same :</p> <p>but أ inserted in رتق, and ملك ديار بكر بن إيل غازي and أرسلان inserted between.</p>
103 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
104 Æ			596	[Adler, <i>Coll. Nov.</i> LXXIX.]	3. Same as (1): but on left of obv. (instead of flower-stem) written sideways نور الدين أنا بك Also in II. A. a muhmilleh (v) over the الناصر ص. The date stops at تسع.
105 Æ				Marsden, cxx. Castigl., CLXIV. Fraehn, <i>Rec.</i>	4. Same as (3): but with ملك ديار بكر بن inserted as on (2).
106 Æ				Cl. XIII. 9.b. Cf. Reiske, <i>Rep.</i> xi. 6.	5. Same as (4): but no muhmilleh.
107 Æ					6. Same as (5).
108 Æ					7. Same as (3): but obverse type <i>reversed</i> ; sword in left hand, trunkless head in right, etc. Pellet above II. A.
109 Æ				Marsden, cxxxiii.	8. Same as (7): but flower-stem restored in place of inscription, and II. A. الله الإمام النا صر لدين أمير المؤمنين

VI. NĀSĪR-ED-DĪN URTŪḠ-ARSLĀN EL-MELİK EL-MANŞŪR.
597-637. 1200.₁—1239.₄₀.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
110 Æ	12.4	IX	598	[Adler, <i>Coll. Nov.</i> LXIX.]	<p>Type I.</p> <p>1.</p> <p>I.  Bust, facing; on each side star.</p> <p>II. A. Within hexagram :</p> <p>الله</p> <p>الإمام الناصر</p> <p>لدين أمير المؤمنين</p> <p>منين</p> <p>M. Between hexagram and double dotted outer circle :</p> <p>ضرب سنة ثمان وتسعين وخمسة مائة</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
111 Æ			599	Castigl., CLXV. Moeller, CXXXIV.	<p>2. I. Same.</p> <p>II. A. Within hexagram:</p> <p>الله</p> <p>الإمام الناصر</p> <p>لدين أمير المؤمنين</p> <p>الملك الظاهر</p> <p>غازى</p> <p>M. Between hexagram and outer double (plain and dotted) circle:</p> <p>ضرب سنة تسع وتسعين وخمسة مائة</p>
112 Æ				Frachn, Rec. Cl.XIII.a.10	<p>3. Same as (2):</p> <p>but أراتق divided أرتق, instead of أرتق.</p>
113 Æ				Inedited.	<p>4. Same as (2):</p> <p>but الملك المنصور أرتق أرسلان instead of</p> <p>ناصر الدين أ | رتق أرسلان</p> <p>and reverse struck over another coin.</p>

No.	Weight.	Diameter.	Date.	Edited or Incited.	Description.
114 Æ	15.5	IX	599	Castigl., CLXVI. Marsden, CXXIV. [Reiske, <i>Rep.</i> xi. 13 & 23. (Scarcely a line without a blunder.)]	<p>Type II.</p> <p>1.</p> <p>I. Crowned centaur-archer to left, head turned facing, stretching with right hand the string of a bow, which he holds in his left hand, with the intent of shooting down the throat of a dragon with jaws a-gape. The dragon appears to be an extension of the centaur's tail. Large point to left of head.</p> <p>In the various spaces round the figure :</p> <p>بماردين | ستة | تسع | تسعين | واسمط | ما (خمسائة = اسمط ما)</p> <p>II. بن أبوب التاصر لدين الله المؤمنين الملك العادل أبو بكر ملك دياركر سلان</p>
115 Æ				Fraehn, <i>Rec.</i> CL.XIII. 10: and cf. <i>ibid.</i> p. 613.	<p>2.</p> <p>Same :</p> <p>but (ناصر) is removed from the right margin to follow دياركر ; thus, ملك دياركر نا .</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
116 Æ					3. Same as (2): but سنة becomes سنة , and و is inserted after تسع .
117 Æ					4. Same as (3): but ناصر as on (1).
118 Æ			599	Castigl., CLXVII.	5. Same as (2): but the centaur-archer is reversed, to right, with bow in right hand, and stretching string with left; and the obv. inscription is thus distrib- uted in the spaces: بماردين سنة | تسع وتسعين | او خمس مائة
119 Æ					6. Same as (5): rev. slightly double-struck.
120 Æ					7. Same as (5): but obv. inscr. thus divided: بماردين سنة | تسعين | او تسع | او خمس مائة
121 Æ				Marsden, CXXVII.	8. Same as (7): but ناصر as on (2), and obv. inscription thus divided: بماردين | تسعين | او تسع | او خمس | سنة مائة
122 Æ					9. Same as (8).

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
123 Æ	9.7	VIII.	606	Marsden, CXXXI. Castigl., CLXVIII. Fraehn, <i>Rec.</i> p.613.10.a. [Adler, <i>Coll. Nov.</i> LXXI.] [Reiske, <i>Rep.</i> xi.19]	Type III. 1. I. A. Man seated on lion to left; his hands raised; ends of girdle (?) flying behind. M. الملك العالم العادل ناصر الدين أرتقى أرسلان ملك ديار بكر II. A. وست الإمام الناصر لدين الله أمير المؤمنين M. الملك العادل سيف الدين أبوبكر ابن أيوب ضرب بماردين سنة 2. Same. 3. Same: but I. M. stops at ديار; and on II. M. ابن instead of بن. 4. Same as (1): but in II. M. ضرب omitted, and a fleuron inserted above the lowest line of II. A.
124 Æ Silv.					
125 Æ					
126 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
127 Æ	5.7	VI	611	Pietrasz., 270. [Moeller, cxxxv.] [Marsden, cxxxvi.] [Adler, <i>Mus.</i> <i>C.B.V.</i> xxxviii.]	Type IV. 1. I. Head, laureate, facing (slightly turned to left). M. ناصر الدنيا والدین أرتق أرسلان ملک دیار بکر II. * ≡ *
128 Æ					2. Same : showing distinctly the lower part, which was illegible on (1).
129 Æ					3. Same : but annulets instead of stars.
130 Æ					4. Same : double-struck.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
131 Æ					5. Same as (1): noteworthy only for its beautiful blue oxidization.
132 Æ				[Pietrasz., 271 ?]	6. I. Head as before, but slightly turned to right. In margin some characters, but illegible. II. الملك الكامل محمد بن أيوب الملك المنصور ناصر الدين أرتق [أرسلان]
133 Æ					7. Same as (6), double-struck.
134 Æ					8. Same as (6).

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
135 Æ	5.6	VI	615	Inedited.	<p>Type V.</p> <p>1.</p> <p>I. Within octogram :</p> <p>الناصر لدين الله أُمير المؤمنين الملك الكامل محمد</p> <p>Between octogram and outer double circle :</p> <p>لا إله إلا [الله] (محمد رسول الله)</p> <p>II. Within octogram :</p> <p>ناصر الملك المنصور الدنيا والدين أرتق أرسلان</p> <p>Between octogram and outer double circle :</p> <p>(ضر) ب | ستة | خمس عشر | ... | ... | ...</p> <p>2. Same.</p> <p>3. Same : struck over a coin of Type IV.</p>
136 Æ					
137 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
138 Æ	15.0	IX	620	Soret, 2 ^{nde} <i>Lettre</i> , no. 65, <i>Rev. Num.</i> <i>Belge</i> , 2 ^{nde} sér. iv. Pietrasz., 269.	<p>Type VI.</p> <p>1.</p> <p>I. Head to right. [Copied from coin of Nero.]</p> <p>M. الملك المنصور ناصر الدنيا والدين أرتق أرسلان</p> <p>II. عشرين التناصر لدين الله أمير المؤمنين الملك الكامل ناصر الدين محمد بن أيوب Fleuron over المؤمنين.</p>
139 Æ					<p>2.</p> <p>Same: but partly double-struck.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
140 Æ	12.8	VIII	623	[Marsden, CXLIV.] [Pietrasz., 301.]	<p>Type VII.</p> <p>1.</p> <p>I. A. Bust facing, with long locks of hair.</p> <p>M. السلطان الأعظم علاء الدين كيقباد بن كي</p> <p>On left side of head, خسه } On right side of head, رو } (= خسرو)</p> <p>II.</p> <p>وعشرين و الإمام المستنصر بالله أمير المؤمنين الملك المنصور أرتق</p>
141 Æ					<p>2.</p> <p>Same :</p> <p>but I struck upon II of Type VI, and II struck upon I of Type VI.</p>
142 Æ					<p>3.</p> <p>Same as (1) :</p> <p>but two muhmillehs, one over المؤمنين the other over المنصور, instead of the ر which is, on this coin, written in a line with the rest of the word.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
143 Æ	2.9	VI	625	Frachn, <i>Rec.</i> Cl. XIII. 11. (but <i>ست</i> <i>vice</i> <i>خمس</i>). [Castigl., CLXXVI.]	<p>Type VIII.</p> <p>1.</p> <p>I. <i>بآله</i> الإمام المستنصر * * * أرتق الملك المنصور تمت</p> <p>II. <i>بدنيسر سنة</i> السلطان المعظم كيقباد بن كاخسرو ٥٣١</p> <p>This coin is conspicuous for its points, most of which are diacritical, viz. :</p> <p>I. المستنصر, عشرين</p> <p>II. المعظم, كيقباد بن كاخسرو</p> <p>2. Same : but no points over the <i>خ</i> and the <i>ن</i></p> <p>3. Same as (2).</p> <p>4. Same as (1) : but points, etc., <i>كيقباد بن كاخسرو</i></p>
144 Æ					
145 Æ					
146 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
147 Æ	9.9	IX	626	[Marsden, CXLV.]	<p>Type IX.</p> <p>1.</p> <p>I. Man seated on lion, exactly as Type III, no. 3.</p> <p>II. ضرب سنة المستنصر بأمره المؤمنين (بسم الله)</p> <p>Two circular marginal inscriptions, both too much effaced to be legible.</p>
148 Æ					<p>2.</p> <p>Same.</p>
149 Æ					<p>3.</p> <p>Same:</p> <p>عشرين quite distinct.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
150 AR	2.9	v	628	Inedited.	<p>Type X. 1.</p> <p>I. Within hexagram composed of a dotted line between two plain lines,</p> <p>الإمام المستنصر بآلله أمير المؤمنين منين</p> <p>Between hexagram and similarly-composed circle.</p> <p>لا إله إلا الله | محمد | رسول الله</p> <p>II. Within hexagram (like that on I):</p> <p>محمد الملك الكامل الملك المنصور أرتق</p> <p>Between hexagram and circle (like that on I):</p> <p>(ضرب) | بكيفة | ستة | ثمان | عشرين | وستمائة</p> <p>2. Same: but unit of date cut off.</p> <p>3. Same: 4. Same: date and mint illegible.</p>
151 AR					
152 AR					
153 AR					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
154 Æ	6·9	IX	628	[Marsden, CLXVIII.] [Pietrasz., 268.] [Adler, <i>Mus. Cuf.</i> XLI.] [Vaux, <i>Atabegs</i> , XI.]	<p>Type XI.</p> <p>1.</p> <p>I. Figure seated cross-legged, within square of dotted lines; head projecting above square; star on each side of head; three annulets on each side within square.</p> <p>نام الدين ارسلان</p> <p>II. \equiv</p> <p>بآلله</p> <p>عشرين وستمائة الإمام المستنصر أمير المؤمنين الملك الكامل محمد</p> <p>2.</p> <p>Same.</p> <p>3.</p> <p>Same: أرتق ارسلان and ناصر الدين transposed; double-struck.</p>
155 Æ					
156 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
					Type XII.
157 Æ	9·8	IX	634	[Pietrasz., 303.]	1. I. Head to face, diademed, similar to Type VII, but brouder. M. السلطان المعظم علا الدنيا والدين كيقباد قسيم أمير المؤمنين II. ضرب بهاردين الإمام المستنصر بالله * * * أمير المؤمنين الملك المنصور أرتق
158 Æ					2. Same.
159 Æ					3. Same, but on I. M. كيقباد omitted, and at sides of II [أربع] وثلثين | وستمئة instead of سنة أربع | ثلثين وستمئة
160 Æ					4. I. Same as (1), but أمير المؤمنين in M. omitted. II. وثلثين وستمئة الإمام المستنصر بالله أمير المؤمنين الملك المنصور أرتق

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
161 Æ	9.1	xi	634	[Vaux, <i>Atabegs</i> , xxvii.]	<p>Type XIII.</p> <p>1.</p> <p>I. A. Figure seated, cross-legged, holding in left hand orb.</p> <p>M. السلطان المعظم غياث الدين كايخسرو قسيم أمير المؤمنين</p> <p>II. (ضرب) بهاردين الإمام المستنصر بالله أمير المؤمنين الملك المنصور أرسق</p>
162-7 Æ					<p>2-7.</p> <p>Same; differing chiefly in degree of indistinctness and of double- struckness.</p>
168 Æ					<p>8.</p> <p>Same: but struck over a coin of Type VI (I over I, and II over II).</p> <p>The date of these coins would be difficult to fix, owing to their bad condition, were it not for the fact that the last (no. 8) is struck over a coin of Type VI. They must there- fore refer to the time of Kaykhusrū II, who began to reign in 634. Of the unit 4 on the coins I think there can be no doubt, and the rest is settled by the accession of Kay- khusrū II, and the death of El- Mustanşir.</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
169 Æ	2.9	IV		Inedited.	<p>Type XIV.</p> <p>1.</p> <p>I. الإمام الناصر</p> <p>[ل]دين الله أمير[لمو]</p> <p>[منين]</p> <p>II. [محمد]</p> <p>الملك العديل</p> <p>الملك المنصور</p> <p>[أرتق]</p>

VII. NEJM-ED-DĪN GHĀZĪ. 637-658. 1239.₄₀-1259.₆₀.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
170 Æ	4.0	v		Inedited.	<p>Type I.</p> <p>1.</p> <p>I. بَالله</p> <p>الإمام المستعصم</p> <p>أمير المؤمنين</p> <p>II. A. الملك الصالح</p> <p>نجم الدين أيوب الملك</p> <p>السعيد غازي</p> <p>بن أرتق</p>
171 Æ			646		<p>2.</p> <p>Same :</p> <p>but less distinct, except that parts of marginal inscriptions are legible.</p> <p>I. الله محمد رسول الله</p> <p>II. ست وأربعين وستما [ثة].</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
172 Æ	3.2	VI	654	Inedited.	<p style="text-align: center;">Type II.</p> <p style="text-align: center;">1.</p> <p style="text-align: center;">I. A. Head facing.</p> <p style="text-align: center;">الإمام المستعصم بالله أمير المؤمنين M.</p> <p style="text-align: center;">Two stars above.</p> <p style="text-align: center;">II. A. Within dotted square.</p> <p style="text-align: center;">. يوسف .</p> <p style="text-align: center;">الملك الناصر</p> <p style="text-align: center;">الملك السعيد</p> <p style="text-align: center;">. غازي .</p> <p style="text-align: center;">Between square and outer dotted circle.</p> <p style="text-align: center;">ضرب بماردين سنة أربع وخمسين</p> <p style="text-align: center;">ستمائة</p>

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
173 Æ	2.6	γ	655	Sorot, <i>Seconde Lett.</i> no. 66. <i>Rev. N.</i> <i>Belge</i> , iv. 2nd Ser. (but date 653). [Pietrasz., 441, 445.]	<p>Type III. (a). 1.</p> <p>I. Within hexagram composed of a dotted line between two plain lines :</p> <p>الإمام المستعصم بآله أمير المؤمنين منين</p> <p>In spaces between hexagram and similarly-composed outer circle :</p> <p>لا إله إلا الله | محمد | رسول الله</p> <p>II. Within hexagram (as on I):</p> <p>يوسف الملك الناصر الملك السعيد غازي</p> <p>In spaces (as on I):</p> <p>ضرب | بهاردين | سنة | خمس | وخمسين وستمائة</p> <p>2. Same : but divided خمس و ا خمسين</p>
174 Æ					

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
175 Æ				Soret, <i>l. c.</i> no. 67. [Pietrasz., 444.]	<p>(b).</p> <p>3.</p> <p>I. In hexagram, as before:</p> <p>الله</p> <p>لا إله إلا</p> <p>الله محمد</p> <p>رسول</p> <p>In spaces, as before,</p> <p>صلى الله عليه | ... | ... | (وسلم)</p> <p>II. Same as (I): date illegible.</p>
176 Æ		656			<p>4.</p> <p>Same:</p> <p>but date 556.</p>
177 Æ		657	•		<p>5.</p> <p>Same:</p> <p>but date 557.</p>
178 Æ			•		<p>6.</p> <p>Same:</p> <p>but date illegible.</p>

VIII. KARĀ-ARSLĀN EL-MELİK EL-MUḤAFFAR.
c. 658-c. 691. 1259.₈₀-1291.₂.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
179 Æ	2·8	VI		Inedited.	<p>Type I.</p> <p>1.</p> <p>I. A. هولاكو المعظم v M. Illegible.</p> <p>II. A. الملك المظفر قرأرسلان M. Illegible.</p>
180 Æ					<p>2. Same.</p>

SUPPLEMENT.

KARĀ-ARSLĀN OF KĒYFĀ.

No.	Weight.	Diameter.	Date.	Edited or Inedited.	Description.
2a Æ	8.9	VIII	559	Pietrasz., 273.	<p>Type I. a.</p> <p>1.</p> <p>I. A. Bust, bareheaded, half turned to left.</p> <p>M. الملك العادل فخر الدين قرا أرسلان بن داود بن أرتقى</p> <p>II.</p> <p>وخمسين وخمسمائة</p> <p>Bust, crowned, facing.</p> <p>عبد الملك بن داود بن أرتقى</p> <p>This coin should have been inserted in the former part of this treatise, and should have been called Type II.; but when the part was written in which it would have been described, the coin was not incorporated in the collection.</p>

II. Published Coins Not In The British Museum.

1.

Adler, *Mus. Cuf. Borg. Vol.* XL.

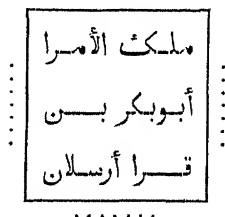
'IMĀD-ED-DĪN ABŪ-BEKIR OF KHARTAPIRT.

This is ascribed by Adler to Nūr-ed-dīn of Keyfā, but his engraving belies his text. I shall describe the coin from the engraving.

Æ I. A. Bust to left.

M. الإمام .. ناصر لدين الله

II.

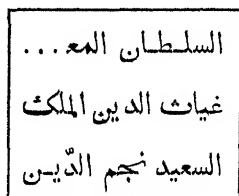


2.

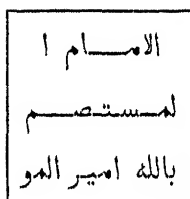
Soret, *IVme. Lettre*, No. 100. *R. N. Belge* II. (2nde série), p. 222.

NEJM-ED-DĪN GHĀZĪ OF MĀRIDĪN.

Æ I.



II.



Traces of marginal inscriptions.

This coin must have been struck between 640 (date of El-Mustaʿsim's accession) and 643 (date of Kay-Khusrū's death).

Bartholomaei, *IVme Lettre* à M. Soret, publishes two coins, one of which (no. 25) resembles my no. 170, but the reverse inscription is different, and the date is 645; the other (no. 26) is almost identical with my no. 175, but the date is 658. This date 658 establishes one year more of Nejm-ed-dīn's reign. Hitherto I had only found 657.

Pietraszewski 308 is apparently a coin of El-Muḍhaffar Ḳarā-Arslān: and 264 is the same as my no. 83, but date 586.

Soret (3me Lettre, No. 59, *Rev. Num. Belge*, T. iv. p. 36, 2nde série) publishes a silver coin which he attributes to Yūluḡ-Arslān. There can, however, be no doubt that the word which he reads يولتى is really يوسف, and that غازى is أرسلان; in short, that the coin is one of Edh-Dhāhir Ghāzī, the Ayyūbī of Ḥalab, under Ṣalāḥ-ed-dīn Yūsuf, as liege-lord.

The following references concern coins which have been attributed with hesitation to the Urtuḡīs.

Soret, *IVme Lettre*, no. 101 (ubi supr.).

Bartholomaei, *IIde Lettre* à M. Soret, no. 21a (*Rev. Num. Belge*, T. v. 2nde série).

Moeller, *De Numis Orient.* Commentatio I. cxxxvi.

METALEGOMENA.

§ 1. *On the Orthography of the Surname of the Khalīfeh En-Nāṣir-li-dīni-llāh.*

This name النَّاصِرُ لِدِينِ اللَّهِ has been the subject of a very common mistake among numismatists. Instead of the full surname, as written above, they have sometimes found a form which they read *En-Nāṣir-ed-dīn* النَّاصِرُ الدِّينِ. This, I need scarcely say, is a solecism of a very grave nature, and numismatists have made a great point of the ignorance or carelessness of those who had to do with the striking of the coins. It seemed to me scarcely credible that any one entrusted with the designing or execution of an Arabic coin should have been so entirely ignorant of the language with which he had to do as to doubly define a noun: and I therefore thought it worth while to sift the matter. The coins in the collection of the British Museum, bearing the surname of the Khalīfeh En-Nāṣir, about 250 in number, form quite large enough a collection to allow one to lay down general principles for the orthography of the name. By examining all these coins, I found that what I had before suspected was correct: (i.) that in every instance of the supposed النَّاصِرُ الدِّينِ there was a connexion between the base of the (supposed) ا and the following ل of الدِّينِ, thus proving the word to be لِلدِّينِ: and (ii.) that the numismatists, ignorant or forgetful of the elementary rule of Arabic orthography, that the alif of the definitive *el*, when preceded by the preposition *li*, is elided, were unable to see the reason for the two lāms being in juxtaposition, and accordingly attributed a solecism to the designers of the coins by writing *En-Nāṣir-ed-dīn*.¹

The true form, then, of the contracted surname is النَّاصِرُ لِلدِّينِ *En-Nāṣir-li-d-dīn*. In the full name النَّاصِرُ لِدِينِ اللَّهِ the word دِينِ was defined by the following word اللَّهِ: but, that being removed, it became necessary to define دِينِ in some other way, and اَل was accordingly prefixed, the resultant meaning being to the religion, whereas لِدِينِ alone would mean to a religion = any religion.

¹ After I had investigated this question for myself, I saw that Frachn had discovered the true reading النَّاصِرُ لِلدِّينِ.

§ 2. *On the Double-Headed Eagle.*

The representation on Arabic coins of a double-headed eagle, resembling exactly the modern imperial eagle, has given rise to much discussion.

Reiske, with more haste than judgment, suggested that this eagle was adopted in consequence of the visit to Palestine in 1228 of the Emperor Frederic II.;—a suggestion hardly countenanced by the chronology, since the double-headed eagle is found on 'Urtukī coins of 1217 (614 A.H.), and on coins of 'Imād-ed-dīn Zenkī of Sinjār of 1190 (586). But even if the date of the occurrence of the eagle on the coins had tallied with that of the Emperor's arrival in the East, Reiske's theory would equally have broken down: for Gatterer² has proved that the double-headed eagle was not used by the Emperors of Germany till the year 1345,—more than a century and a half after the first appearance of this eagle on Arabic coins.

That the double-headed eagle was the armorial badge of the city of *Āmid* is, I think, sufficiently proved by Ramusio's³ account of his remarking the imperial arms on many places on the walls of *Āmid*; and by the fact that the very first coin (known to me) struck at *Āmid*, since the introduction of images on Mohammadan coins, bears this eagle.⁴

M. de Longpérier, in a review of the discoveries made in Pteria by Texier and Hamilton, in the *Revue Archéologique* (vol. ii. old series), has sketched out what he believes to be the history of the double-headed eagle. On a relief at the village of Boghar Kieui, in Asia Minor, are represented two attendants of one of the principal ancient divinities, placed upright on a double-headed eagle. When the Seljūkis conquered Asia Minor, they must have been struck by this representation as resembling the fabulous bird the 'Ankā, which is described by El-Kāzwīnī as the greatest of birds, carrying off elephants as

² Comm. Soc. Götting. x. 241.

³ Delle Navigazioni e viaggi raccolti da Gio. Batt. Ramusio, ii. 79 (Venet. 1606).

⁴ It is true that the eagle appears again (in the following year) on a coin of Keyfā: but this does not affect the argument, as it was natural enough that the Urtukīs should use the same type in both cities.

a kite carries off a mouse.⁵ On the side of a block of stone (the front of which is formed into a giant bird) at Euyuk is seen cut a figure of a double-headed eagle, which is supposed by M. de Longpérier to have been sculptured by the Seljūkis. Next, the Atābegs and Urtukīs copied the eagle from the Seljūkis. And, finally, by their intercourse with Europeans, the Seljūkis gave the idea to the Flemish Counts, whence it spread through Europe.

A curious fact, hitherto unnoticed, is that the earliest Urtukī double-headed eagle has for its wings two bearded men's heads (see Num. Chron. N.S. XIII. Pl. x.).

§ 3. *On Type III. of Yūluk-Arslān.*

It has been suggested that this group is intended to record the lamentation of the Muslims on the occasion of the death of their great champion Ṣalāḥ-ed-dīn, as the coins which show the type were struck in the year of his death (589). This is by no means disproved by the discovery by Dr. Scott (*Rev. Archéol.* x. 296) that the representation on the coins bears a strong resemblance to a relief in terra-cotta (in the British Museum) representing the mourning of Penelope for the departure of Ulysses. The Urtukīs wanted to engrave on their coins some mark of their regret (politic or sincere) for the death of Ṣalāḥ-ed-dīn, and they found a very suitable model in the relief above mentioned, of which they might very possibly have seen an example. In any case there can be nothing but conjecture on the subject.

Type IV. of Yūluk-Arslān is supposed by Marsden to refer to a scene described by Abu-l-Fiḏā (*Annales*, ann. 582) as having taken place in Ṣalāḥ-ed-dīn's tent. But I think it very improbable that this scene should have been depicted fourteen years after its occurrence, and seven years after the death of the principal actor.

§ 4. *On the name of the Fifth Prince of Keyfā.*

Marsden has devoted some space to the discussion whether the name of the successor of Ḳarā-Arslān was Moḥammad, or Maḥmūd, or both, and comes to the conclusion that both names

⁵ LANE'S *Thousand and One Nights*, ch. xx. note 22. Col. Seton Guthrie possesses a very remarkable Indian coin, representing the Rōkh or the 'Anḳā carrying off several elephants.

were applied to him. This opinion he founds (i.) on a coin, and (ii.) on the statement by Abu-l-Fiḍā (*Annales*, ann. 562) that Karā-Arslān was succeeded by his son Kuṭb-ed-dīn Maḥmūd. *First*, as to the historical statement, I must observe that though Reiske in his Latin version has written Kuṭb-ed-dīn, yet in the Arabic text on the opposite page he has written نور الدين Nūr-ed-dīn. I cannot imagine the cause of this discrepancy, but such it is. As to the other name, Maḥmūd, every one knows that the two names محمود and محمد may be confounded in a hastily-written MS., and Reiske's inaccuracy in the matter of Kuṭb-ed-dīn makes it not improbable that he was also careless in the name Maḥmūd. But, besides this, I have the counter-testimony of Ibn-ul-Athīr for the name being Moḥammad (ed. Tornberg, xi. ۱۴۷), though he does not mention the surname. *Secondly*, as to the testimony of the coins, there is plenty of coin-evidence for the prince's name being Moḥammad and his surname Nūr-ed-dīn: but there is none for his surname being Kuṭb-ed-dīn, and the coin on which Marsden based his belief that Moḥammad was also called Maḥmūd is in reality a coin of Nūr-ed-dīn Maḥmūd Ibn-Zenkī of Ḥalab, as the comparison of several specimens clearly shows.

§ 5. *On certain Readings on the Coins.*

Coin No. 1.

It is singular that so obvious an interpretation of the letters نو as that in the text should never before have been proposed. Marsden endeavours to twist نو into اثنین و (or, as he adds, ثنین, a form of which I confess myself entirely ignorant); and Fraehn does not even attempt to interpret the letters.

Nos. 11-14.

I believe it impossible to assign any satisfactory meaning to the letters or ciphers at the top of the obverse. I think they were inserted merely to take the place of IC XC on the Byzantine model.

No. 15.

فی آیام is Soret's reading, and undoubtedly correct, though many others have been tried.

No. 21.

There can be no doubt that Castiglioni's reading محيى العدل is the correct one.

No. 28.

This coin has been attributed by Marsden to Mödūd, as though he alone could have the title الملك المسعود.

No. 36.

The names ناصر الدين محمد on the reverse belong to El-Kāmil.

No. 40.

This must, I think, be identified with the coin described by Adler, *Coll. Nov.* no. LXXII.

No. 46.

Adler has attributed this coin to Nūr-ed-dīn of Keyfā, but obviously he is wrong. The defectiveness of his specimen enabled him to insert Nūr-ed-dīn from his inner consciousness.

No. 90.

Adler reads محيى; Castiglioni ولي; instead of على.

No. 95.

Marsden reads the date سبع; but his engraving, as well as other coins, show it to be تسع.

No. 123.

Adler (*Coll. Nov.* LXXI) and others read date 605, but I think erroneously. The coins I have described certainly have 606.

No. 127.

Marsden and Moeller read أمر الفلاس أحمد in defiance of the facts that أمر governs its object through the preposition ب; that the form he suggests is unheard-of in that position; that the Urtukīs never called their coins *fulūs*; and lastly that the coins show plainly the correct reading (adopted by Pietraszewski) of أبو العباس أحمد. Adler has judiciously shirked the top line altogether.

STANLEY LANE POOLE.

BRITISH MUSEUM,
Oct. 22, 1873.

ADDITIONS AND CORRECTIONS.

In my last article but one, on the coins of the Muwahhids (*Num. Chron.* XIII. p. 147 ff.), I have discovered a singular transposition, which must, I suppose, have been caused by some disarrangement of the slips of MS. Nos. 9 and 10, which are placed under the heading of Abū-Yūsuf Yaḡkūb, really belong to Abū-Yaḡkūb Yūsuf I., and should follow no. 5 (no. 3 of Yūsuf I.). Also in the same article the hemzeh over القائم (p. 154) and that over يومئذ (appendix) is by mistake written below instead of above the ye; and in no. 13 *diacritical points* أبرهم is misprinted أبوهم.

In my article on the Urtukīs, Part I. (*Num. Chron.* XIII. p. 254 ff.), the 1 in ١٢٨ (p. 288) should be ٩ (١٢٩). In the reverse of no. 19 the أ أمير (below the area) should be transposed to the end of the last line *within* the square. In No. 34 reverse, for محمد, read محمود.

POSTSCRIPT.—I take this opportunity publicly to express my thanks to Dr. WOLD TIESENHAUSEN for his kindness in sending me a complete list of all the *published* coins with which he was acquainted of the three dynasties of the Seljūḡīs, Urtukīs, and Benī-Zenkī. Although this list was sent to assist me in my work for the international edition of Marsden, yet I have, of course, made use of it for the present article; and the result has been some additions to the list of published coins on page 382, and the confirmation of my former quotations. For the Seljūḡīs and Benī-Zenkī Dr. Tiesenhausen's list will be still more useful.

S. L. P.

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THE END.

PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1872—1873.

OCTOBER 17, 1872.

J. EVANS, Esq., F.R.S., Secretary, in the Chair.

The following presents were announced and laid on the table:—

1. The Journal of the Royal Asiatic Society of Great Britain and Ireland. N.S., vol. vi. Part I. 1872. From the Society.

2. Revue Numismatique Belge. 5^{me} Série, tome iv., 4^{me} livraison. From the Society.

3. Smithsonian Report for 1870. From the Smithsonian Society.

4. Publications de la Section Historique de l'Institut Royal Grand-ducal de Luxembourg. Part XXVI. (iv.) 1870—1871. From the Institute.

5. Journal of the Royal Historical and Archæological Association of Ireland. Vol. ii., 4th Series, April, 1872. No. 10. From the Association.

6. Mémoires de la Société royale des Antiquaires du Nord. N.S. 1870—1871. From the Royal Society of Northern Antiquaries, Copenhagen.

7. Tillæg til Aarbøger for Nordisk Oldkyndighed og Historie; aargang 1870. From the Same.

8. History of India. Vol. iv. By Sir H. Elliot. From Lady Elliot.

9. Leser's Besondere Münzen, &c. From W. Blades, Esq.

10. Munten van Nederland voor den Jare 1576, Plates, by P. O. Van der Chijs. From W. Blades, Esq.

The Rev. J. H. Pollexfen exhibited two Anglo-Saxon sceattas, one of which was inscribed with the Letters EPA in Runic characters. Mr. Stanley L. Poole communicated a paper "On Arabic Glass Coins," which is printed in the Num. Chron., N.S., vol. xii., p. 199.

Mr. Evans read a paper, by himself, "On a Hoard of English Gold Coins found at St. Albans." See Num. Chron., N.S., vol. xii., p. 186.

Mr. Cochran Patrick communicated a paper "On the Annals of the Coinage of Scotland." See vol. xii., p. 242.

NOVEMBER 21, 1872.

W. S. W. Vaux, Esq., President, in the Chair.

Mr. Jules Fonrobert was elected a Member of the Society.

The following presents were announced and laid upon the table :—

1. Aarbøger for Nordisk Oldkyndighed og Historie. Parts II., III., and IV. of 1871, and Part I. of 1872. From the Royal Society of Northern Antiquaries, Copenhagen.

2. The Canadian Antiquarian and Numismatic Journal. Vol. i., No. 2. From the Society.

3. Five volumes of MS. Catalogue and Notes on English Coins and Tokens. From R. W. Cochran Patrick, Esq., F.S.A. Scot.

4. Bulletins de la Société des Antiquaires de l'Ouest, 2^{me} trimestre du 1872. From the Society.

5. Archæologia Cantiana. Vol. viii. From the Kent Archæological Society.

Mr. Webster exhibited a gold stater of Eretria, in Eubœa, having on the obverse a cow and calf, and on the reverse a sepia or cuttle-fish, in an incuse square.

Mr. H. W. Henfrey exhibited, on behalf of Mr. Mackenzie, of Dornoch, a shilling of James I., second issue, with the spur-rowel mint-mark, which came into use August 20th, 1619; also a half-groat of James I., second issue, with the coronet mint-mark used in 1607 and 1608, not published either in Snelling or Hawkins, and reading TVATVR, instead of TVEATVR.

The Rev. A. Pownall exhibited a gold medal struck on the marriage of Prince Napoleon with the Princess Clotilde, in 1859, weight 8 ounces 16 grains. Obverse, NAPOLÉON JOSÉPH CAR. PAULUS MARIA CLOTILDIS DE SABAUDIA PRINCIPES, heads of Napoleon and Clotilde; reverse, GALLIA ITALIAE CONJUGIO AUSPICALI JUNCTA. AUGUSTAE TAURIN XXX JAN MDCCLXIX ANT BOVY F., the Prince and Princess joining hands before an altar.

Mr. Evans read a paper, communicated by Mr. J. F. Neck, "On some Unpublished Varieties of English Silver Coins, issued in the reign of Richard II., June 22, 1377—September 29, 1399." See vol. xii., p. 223.

DECEMBER 19, 1872.

W. S. W. VAUX, Esq., President, in the Chair.

Miguel T. Salas, Esq., was elected a member of the Society.

The following presents were announced and laid upon the table:—

1. Periodoco di Numismatica e sfragistica per la Storia d'Italia. Firenze, 1872. Anno 4. From the Society.

2. Description de Médailles et Jetons relatifs à l'histoire Belgique, frappées pendant le xviii^{me} siècle. Par M. J. J. Raepsaet. Gand, 1838. From W. Blades, Esq.

3. Recherches sur les Monnaies frappées dans les provinces des Pays-Bas. Par M. Gérard. Gand, 1838. From W. Blades, Esq.

4. Notice sur les Monnaies frappées à Rummen. Par C. P. Serrure. Gand, 1839. From W. Blades, Esq.

5. Notice sur quelques anciens Méreaux de Belgique. Par C. P. Serrure. Gand, 1838. From W. Blades, Esq.

6. Notice sur un Buste antique en bronze, découvert dans la province de Liège. Par J. E. G. Roulez. Gand, 1836. From W. Blades, Esq.

7. Expositio aurei numismatis Heracliani ex Museo Sanctiss. D.N., Clementis XI., Pont. Max. By J. Christophoro Battello. Rome, 1702. From W. Blades, Esq.

8. "Beschryving en afbeeldingen van Nederlandsche Gedenk-penningen welke sedert 1815 tot 1838 aan 'sryks Munt te Utrecht zijn geslagen en verkrijgbaar gesteld, door F. J. Van Heeckeren van Brandsenburg." With MS. additions up to 1852. By P. O. Van der Chijs. From W. Blades, Esq.

Mr. J. F. Neck exhibited a pattern for a London halfpenny of Edward I. or II., of fine work for the period, reading, EDWARDVS REX AN., and with the shoulders of the King draped; weight, 80½ grains; also an unpublished groat of Edward III., reading, EDWARD: DEI: G: REX: ANGL: DNS: HIB: Z: AQ: T, and with a double line beneath the King's neck; weight, 78½ grains, struck after the twenty-seventh year of the King's reign.

Mr. H. W. Henfrey exhibited two specimens of modern Chinese paper money; also, on behalf of Mr. T. M. Simkiss, two pennies of Henry VIII. and Edward VI. respectively. The first of these pieces was of Henry VIII.'s second coinage (cf. Hawkins's "Silver Coinage," fig. 399). Obverse, King seated, H'D'G'ROSA'SIE'SPIA'; mint-mark, a six-pointed star; reverse, cross over shield, CIVITAS DVRRAM, at the sides of the shield, C—D; weight, 9½ grains. The second piece was from the same die as the preceding, but the letter H on the obverse had

been altered into an E. Supposing this alteration not to have been the work of a modern forger, this coin would belong to the fifth year of Edward VI.

The Rev. H. C. Reichardt, of Alexandria, communicated a paper "On the Legend 𐤀𐤍𐤏 occurring on Phœnician Coins," in answer to an article communicated by M. F. de Sauley. It is printed in the Num. Chron., vol. xii., p. 221.

Mr. T. J. Arnold communicated a paper "On the Medal struck by Napoleon I. on his intended Invasion of England, with the legend, DESCENTE EN ANGLETERRE, and the exergual inscription, FRAPPÉE À LONDRES." See vol. xii., p. 266.

Mr. Webster contributed a list of rare and unpublished Greek Imperial coins. See vol. xiii., p. 19.

JANUARY 16, 1873.

W. S. W. VAUX, Esq., President, in the Chair.

George Mackenzie Bacon, Esq., M.D., James Murray Foster, Esq., Charles Francis Keary, Esq., Stanley E. L. Poole, Esq., and Thomas Martin Simkiss, Esq., were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. Medaillen auf die Thaten Peters des Grossen. By J. Iversen. From the Author.

2. The Journal of the Royal Historical and Archæological Association of Ireland. Vol. ii., 4th Series, July, 1872. From the Society.

3. Revue de la Numismatique Belge. 5^{me} Série, tome v., 1^{re} livraison. From the Society.

Mr. Evans exhibited a large silver coin, 3·2 inches in diameter, apparently a three-dollar piece of Christian Louis, Duke of Brunswick-Lüneburg: obverse, *OL* in monogram crowned, and surrounded by a laurel wreath and shield of

arms; legend, SINCERE ET CONSTANTER, ANNO 1650; reverse, a horse in the air above a city, crowned with laurel by a hand from out a cloud. Also a bronze medal of Gustavus III. of Sweden, struck on the occasion of his death. The device of the reverse is a tomb surrounded by arms, and with a female figure crowning an urn upon it. In the centre of the tomb is a bas-relief of the assassination of the King by Count Ankerstrom. The dies were engraved by Kuchler.

Mr. Henfrey exhibited a silver medal, made in Holland, upon the death of Cromwell, in 1658; obverse, bust of Cromwell; reverse, bust of Masaniello. This rare medal, which is from the collection of Sir George Chetwynd, is made of two large *plaques* of silver separately cast and chased.

Mr. Golding exhibited a leaden coin of St. Nicolas, found near Bury St. Edmunds; Mr. Roach Smith an impression of an ancient British coin of Voreica, found on the coast to the south of Chichester; Mr. J. Williams a sulphur cast of the English imitation of the "Descente en Angleterre" medal; and Major Hay a false medallion of Clodius Albinus, and a Scandinavian Runic coin.

Mr. Stanley L. Poole communicated a paper "On the Mint Characteristics of the Arabic Coins of the First Two Centuries of the Hijreh." See vol. xiii., p. 54.

Mr. Vaux read a paper, by himself, "On the Connexion of Ancient Rome with India, as shown by Roman Coins found in different Parts of that Country."

FEBRUARY 20, 1878.

W. S. W. VAUX, Esq., President, in the Chair.

Mons. George d'Alexéieff and Richard Hoblyn, Esq., were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. The Journal of the Royal Historical and Archæological Association of Ireland. Vol. ii., 4th Series, October, 1872, No. 12. From the Society.

2. The Canadian Antiquarian and Numismatic Journal. Vol. i., No. 8. From the Montreal Numismatic and Antiquarian Society.

3. Münz und Medaillen-Kabinet des Grafen Karl zu Inn-und Knyphausen. From the Count.

4. Catalogue du dépôt des Coins, Poinçons et Matrices de Monnaies, Médailles, Jetons, Sceaux, Cachets et Timbres, appartenant à l'État. Par C. Piot. Brussels, 1861. From W. Blades, Esq.

5. An Essay about the Origine and Virtues of Gems. By the Hon. Robert Boyle, Fellow of the Royal Society. London, 1672. From W. Blades, Esq.

6. The Knowledge of Medals; or, instructions for those who apply themselves to the study of medals, both ancient and modern. Written by a Nobleman of France; made English by an eminent hand. London, 1715. From W. Blades, Esq.

Mr. Roach Smith exhibited casts of two gold coins, respectively of Augustus (FORT·RED·CAES·AVG·S·P·Q·R, Cohen 96, B.C. 19), and of Cunobelinus (Evans, Pl. IX., fig 3), lately found between Tunstall and Borden, in Kent.

Mr. A. Browne exhibited a medal of Admiral Vernon, struck in commemoration of his naval victory at Porto Bello.

Mr. Henfrey exhibited an unpublished Chinese Tseen, or one cash piece of the epoch Kea-King 1796—1820 (Emperor Jintsung), minted at Aksu, the name of which city is in Manchu and Arabic. This coin was cast for the use of the Mohammedan tribes of Soungaria, who were finally subjugated by the Chinese in 1759.

Mr. J. E. Price exhibited a small hoard of coins of Philip le Bel, struck at Tours, lately discovered near the church of St. Antholin, London.

Mr. Frentzel exhibited a rough proof pattern halfpenny of

Charles II., and Mr. Hoblyn a pattern sixpence of William III., and a York sixpence of 1697.

Mr. Vaux read a paper on a tetradrachm of a hitherto unknown King of Bactria, with the inscription ΒΑΣΙΛΕΩΣ ΕΠΙΦΑΝΟΥΣ ΠΑΤΩΝΟΥΣ, and bearing the date 147 of the Seleucid era. The chief interest of this piece is that it fixes the date of the death of Eukratides to B.C. 165, supposing it to have been struck by Plato immediately after that event, which is highly probable, as the portrait upon the obverse is that of Eukratides. This valuable monument, lately discovered in Central Asia, has been acquired by the British Museum.

Mr. T. J. Arnold communicated a paper "On a Coin of Antoninus Pius." See vol. xiii., p. 180.

Mr. Cochran Patrick communicated a paper "On the Annals of the Scottish Coinage." Printed in vol. xiii., p. 41.

MARCH 20, 1873.

W. S. W. VAUX, Esq., President, in the Chair.

John Butler, Esq., and M. Aurelio Prado y Rojas, were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. An Essay on the Usefulness of Medals, particularly those of Antiquity. By the Rev. J. Keysall. From R. W. Cochran Patrick, Esq.

2. Bulletins de la Société des Antiquaires de l'Ouest 3^{me} et 4^{me} trimestres de 1872. From the Society.

3. Souvenirs Numismatiques de la Révolution Française, 1870—1871. From W. Blades, Esq.

4. Köhler's Historische Münzbelustigung, 12 vols. From W. Blades, Esq.

Mr. D. C. Elwes exhibited a rubbing of a silver coin of Gaucher de Châtillon, Comte de Porcien, A.D. 1303—1329;

Mr. Henfrey a small collection of Bactrian coins, including a silver obol of Eukratides and a hemidrachm of Apollodotus, together with a twenty cash piece of "Milay 1834;" Rev. W. Allan a specimen of the new Japanese circular coinage; Mr. Neck a groat of Edward IV.'s second coinage, struck at York, with an unpublished mint-mark, a lys upon the crown; Mr. Hoblyn a rare Scotch noble of Charles I., found in Linlithgowshire; Mr. Vaux a square copper coin of the Bactrian King, Menander, with the reverse type of a dolphin; and Mr. P. Gardner a sulphur cast of the original French "Descente en Angleterre" medal, with the inscription *FRAPPÉE À LONDRES*, formerly in the Stokes collection.

Dr. F. Imhoof-Blumer communicated a paper "On the Inscription TPIH on Ancient Greek Coins." See vol. xiii., p. 1.

Mr. E. T. Rogers, H.B.M. Consul at Cairo, communicated a paper "On Glass as a Material for Standard Coin Weights." It is printed in vol. xiii., p. 60.

APRIL 17, 1878.

W. S. W. VAUX, Esq., President, in the Chair.

The following presents were announced and laid upon the table:—

1. Académie Royale de Belgique Centième Anniversaire. Vols. i. and ii., 1872. From the Academy.

2. Annuaire de l'Académie Royale des Sciences des Lettres et des Beaux-Arts de Belgique. 38^{me} année, 1872, et 39^{me}, 1873. From the Academy.

3. Bulletins de l'Académie Royale de Belgique. 2^{me} Série, tomes xxxi. and xxxii. of 1871, and xxxiii. and xxxiv. of 1872. From the Same.

4. Bulletins de la Société des Antiquaires de l'Ouest. 4^{me} trimestre de 1872. From the Society.

5. *Revue de la Numismatique Belge*. 5^{me} Série, tome v., 2^{me} livraison, 1872. From the Society.

6. Notice sur une médaille antique inédite, ainsi que sur deux autres très rares de Pharzoïos et de Kerkinitis. By M. Georges d'Alexéieff. From the Author.

7. The Journal of the Royal Historical and Archæological Association of Ireland. Vol. ii., 4th Series, October, 1872. From the Association.

8. *Curiosités numismatiques*; jetons ou monnaies rares ou inédits 19^{me} art. by M. R. Chalon. From the Author.

Mr. H. W. Henfrey exhibited an unpublished Chinese Tseen of Seuen-tsung, the sixth emperor of the present dynasty, who reigned 1820—1850.

Mr. H. Christie exhibited, on behalf of Mr. Strickland, a specimen of the Gun-money of James II., struck in silver; also a silver coin of Emanuel I., King of Portugal.

Major Hay exhibited seven small brass coins of the Empress Theodora.

Mr. Henry Webb exhibited a false coin of the Empress Matilda, the mother of Henry II., with the obverse legend MAVTILDE REGINA. As this is not the only one which has lately been brought under the notice of numismatists, collectors should be on their guard against these ingenious forgeries.

Mr. Hoblyn exhibited a pattern, in silver, for a farthing of Charles II., bearing date 1676.

Mr. T. J. Arnold read a paper, by himself, "On a Symbol which occurs on some Coins of Aigiale, in the island of Amor-gos, and other Cities." Printed in vol. xiii., p. 125.

Mr. B. V. Head read a paper, communicated by Mr. R. W. Cochran Patrick, "On the Annals of the Coinage of Scotland, A.D. 1543—1567." See vol. xiii. p. 41.

MAY 15, 1873.

W. S. W. VAUX, Esq., President, in the Chair.

The following presents were announced and laid upon the table:—

1. *Choix de monnaies Grecques du Cabinet F. Imhoof-Blumer.* Winterthur, 1871. From the Author.

2. *Lexicon Frisicum, A—F.* By Justus Halbertsma. Edited by T. Halbertsma. From the Editor.

3. *Description of the New Japanese Currency, with plates of the gold, silver, and copper coins.* From Dr. Bushell.

4. *The Canadian Antiquarian and Numismatic Journal.* Vol. i., No. 4. From the Numismatic and Antiquarian Society of Montreal.

5. *Journal of the Royal Asiatic Society of Great Britain and Ireland.* N.S., vol. vi., Part II. From the Society.

The Ven. E. Trollope exhibited a Roman gold coin of the Emperor Eugenius, struck at the Lyons mint; Mr. Roach Smith, an ancient British coin, found at Strood, near Rochester (Evans, Pl. B, No. 1); Mr. Evans, a small gold coin of Tinnomius, found on the shore at Selsea Bill; obv. *TIN* on a sunk tablet; rev. a horse? l.; below, a saltire; above, ornaments; Mr. Henfrey, a silver coin of Tasciovanus, found near Wallingford (Evans, Pl. vi., 7); Mr. Henry Gill, a gold British coin, found at Kettering, Northamptonshire; and the Rev. T. Cornthwaite a Bactrian coin of Hermæus.

Mr. B. V. Head read a paper, by himself, "On the Greek Autonomous Coins from the Cabinet of the late Mr. E. Wigan, lately acquired by the British Museum." See vol. xiii., pp. 89 and 309.

The meeting concluded with a vote of thanks, proposed by the President, and seconded by Mr. J. Evans, to the Keeper of the Department of Coins and Medals in the British Museum, and to his colleagues, for the judgment and care exhibited by

them in the selection for the National Museum of the most valuable and important coins from the Wigan Collection.

JUNE 19, 1878.

ANNIVERSARY MEETING.

W. S. W. VAUX, Esq., President, in the Chair.

The minutes of the last Anniversary Meeting were read and confirmed. The Report of the Council was then read to the Meeting, as follows :—

GENTLEMEN,—The Council again have the honour to lay before you their Annual Report as to the state of the Numismatic Society. The Council regret to have to announce their loss by death of the four following Members :—¹

John B. Bergne, Esq., F.S.A.

General Fox.

Edwin Norris, Esq., F.S.A.

Sir George Musgrave, Bart., F.S.A ;

and, by resignation, of the following Member :—

W. Stavenhagen Jones, Esq.

On the other hand, they have much pleasure in recording the election of the twelve following Members :—

Monsieur George d'Alexéieff.

G. Mackenzie Bacon, Esq., M.D.

John Butler, Esq.

M. Jules Fonrobert.

James Murray Foster, Esq.

Richard Hoblyn, Esq.

Charles Francis Keary, Esq.

Stanley E. Lane Poole, Esq.

¹ Since this was written we have to record the deaths of one honorary member, J. Y. Akerman, Esq., and of Mr. J. Gough Nichols, F.S.A., Capt. Murchison, and J. S. Wyon, Esq., as well as the resignation of A. Coombs, Esq., J. S. Smallfield, Esq., and G. S. Veitch, Esq. Memoirs of our deceased members will be given in the next annual report.

Count von Prokesch-Osten.
 M. Aurelio Prado y Rojas.
 M. Miguel T. Salas.
 Thomas Martin Simkiss, Esq.

According to our Secretary's Report, our numbers are therefore as follows :—

	Original.	Elected.	Honorary.	Total.
Members, June, 1872 . . .	5	187	88	180
Since elected	—	12	—	12
	5	149	88	192
Deceased	2	2	—	4
Resigned	—	1	—	1
Erased	—	1	1	2
Members, June, 1873 . . .	3	145	87	185

We proceed to give a brief notice of our deceased members.

Mr. John Brodribb Bergne was born within the parish of Kensington, in the year 1800: he was the oldest child of his parents, having three brothers, but no sister. His mother, whose maiden name was Brodribb, came of an old Somersetshire family; his father, a Frenchman by birth, and a native of Auvergne, had left his native country, with other royalist emigrants, at the time of the Revolution, and settled in England.

From the year 1815 to 1817, John Brodribb Bergne acted as a kind of private secretary to Mr. Rolleston, one of the seniors of the Foreign Office Establishment; and his knowledge of the French language, derived from his father, with an accuracy and comprehensiveness in those days not very often equalled—combined with promising talents in other respects—pointed him out as a youth likely to be of great use in some diplomatic department. He accordingly received an appointment in the Foreign Office, and there remained to the time

of his death ; thus fulfilling a term of service considerably beyond half a century. It is interesting to state, that young Mr. Bergne was introduced to the late Dr. Valpy, of Reading, and enjoyed a share in the attention and friendship of that remarkable scholar, who quickly discerned in him elements of character which promised future excellence. The post which he held in the King's letter department brought him more into contact with the successive Secretaries of State for Foreign Affairs, than was usual with young men ; and his knowledge, ability, and social qualities won for him the esteem and confidence of his superiors. Since the 1st of July, 1854, he filled the responsible situation of Superintendent of the Treaty Department, and was a member of the Commission which sat in 1865 to revise the Slave Trade Instructions. It has been stated by the most competent judges that "in his own department, it is not too much to say, that his reputation as an authority in all matters relating to Treaties was second to that of no British or Foreign diplomatist. In him the Secretary of State has lost a trusted adviser, and his colleagues a thoroughly competent coadjutor, whose keen sense of honour and kindly heart endeared him to all with whom he came in contact."

Mr. Bergne was well read in several branches of literature, and he cultivated his natural gifts in a way which rendered him a keen and skilful critic, singularly apt in the discernment of all violations of good taste. He possessed a valuable library, which had been selected with much care and judgment, and was especially rich in works relating to antiquities—a subject in which he took a deep and lively interest. But he was best known as a learned Numismatist. He was one of the original members of the Numismatic Society, having assisted at its foundation in 1837, and in 1841 was elected upon its Council. In July, 1843, he accepted the post of Treasurer in the place of Mr. Cuff, and held that office until 1857, when the numerous other demands upon his time induced him to resign it. During

subsequent years he several times accepted the chair of one of the Vice-Presidents of the Society. In 1844 he became a fellow of the Society of Antiquaries. During his tenure of office as Treasurer he usually undertook the preparation of the Proceedings of the Society for the pages of the NUMISMATIC CHRONICLE, and they exhibit ample evidence of both his skill in Numismatics and of the accuracy of his mind. The papers he contributed to the Society were no less than sixteen in number, as will be seen from a reference to the Index of the first twenty volumes of the first series of the NUMISMATIC CHRONICLE, and of the first ten of the New Series. They relate mainly to the Saxon, English, and Roman series. Of the importance of his collections of the two former classes of coins, some idea may be obtained from the notice of their sale at p. 304 of vol. xiii. of the NUMISMATIC CHRONICLE. His series of Roman coins, both in silver and brass, was also extremely select; but was made over by him during his life-time to the late Mr. Edward Wigan, on whose death, about two years since, the choicest of his specimens passed into the National Collection. Mr. Bergne's large knowledge, ready humour, habitual cheerfulness, benevolent disposition, and sparkling powers of conversation rendered him a favourite in all the social circles he visited; but the noblest qualities of his character—his unswerving integrity, his high sense of honour, his delicate kindness, his purity of mind and heart, and his religious habits, free from all superstition and fanaticism—could be fully appreciated only by those intimate friends who knew him through a long life, and now survive to cherish his memory and mourn his loss.

His remains were interred, on the 21st of January, at Brompton Cemetery. Around his grave there stood, besides the immediate relations and mourners, Earl Granville, Principal Secretary of State for Foreign Affairs, Mr. Hammond, Permanent Under-Secretary, together with a little knot of colleagues and friends.

General Charles Richard Fox was the son of the third Lord Holland, and grandnephew to the celebrated Charles James Fox.* He was born in 1796, and died April 18th, 1873, in his seventy-seventh year. General Fox served in the navy from 1809 to 1813, and was present at the siege of Cadiz in 1810, and Tarragona in 1813, on board his Majesty's ship *Malta*, under Vice-Admiral Sir B. Hallowell. He obtained his first commission in the army in June, 1815, in the 1st or Grenadier Guards, in which distinguished regiment he became Captain and Lieutenant-Colonel, in October, 1830. The deceased General married, June 19, 1824, Lady Mary Fitzclarence, second daughter of the Duke of Clarence and Mrs. Jordan. Lady Mary was raised to the rank of a marquis's daughter in May, 1831. He sat in the House of Commons during several Parliaments—namely, for Calne, Tavistock, and Stroud, being elected at the general election in 1831 member for the first-named borough in conjunction with the late Lord Macaulay. In May the following year he was returned to the House of Commons for Tavistock, and for Stroud in November, 1835; but shortly after his return for the latter borough he accepted the Chiltern Hundreds to make room for Lord John Russell, who at the time was Secretary of State for the Home Department. In November, 1832, General Fox was appointed Surveyor-General of the Ordnance, and was subsequently Secretary to the Master-General of the Ordnance. He was appointed in July, 1830, Equerry to Her Majesty Queen Adelaide, and in May, 1832, an aide-de-camp to William IV. His wife, Lady Mary Fox, who was for many years State Housekeeper of Windsor Castle, died in 1864. General Fox married, secondly, in August, 1865, Katherine, second daughter of the late Mr. John Maberly, M.P. General Fox was at the time of his death Receiver-General of the Duchy of Lancaster, an office he had held for a considerable period.

General Fox did not take, like his father, a leading part in

* We are indebted for the following notice to the *Times* newspaper.

politics, but he inherited from both parents those social qualities for which his family has been distinguished for three generations. In him was combined the genial temperament of his father with that keen and rapid intuition of character which Lady Holland possessed in an eminent degree. His conversation had a peculiar charm; it was so fresh and original, so Horatian in its inexhaustible joyousness and playful irony, so frank and fearless in denouncing shams and conventionalities, and in upholding right against wrong. Himself learned in various departments of archæology, especially numismatics, he loved the society of those who had attained intellectual eminence in any branch of knowledge; following the traditions of Holland House, he lost no opportunity of bringing out latent merit in whatever rank of life it could be found, and, at a time when strong prejudices of caste still kept asunder men who would have been the better for knowing each other, he gathered round him a society of peculiar interest from its cosmopolite variety. The leading feature of General Fox's character was the large-minded and far-reaching benevolence which pervaded his whole life. He was always trying to help others, and his was no ostentatious, indiscriminating charity, administered through the machinery of societies and paid agents. He liked to be his own almoner, and devoted his life to this good work. His ready sympathy did not blind his judgment, and his bounty was enhanced by the tender and considerate manner in which it was bestowed. Though he had outlived the friends of his youth, his hold on the affections of all about him seemed to grow stronger as his life decayed, and the memory of his constant and unfailing kindness, enshrined as it is in so many grateful and mourning hearts, will not readily pass away.

General Fox's cabinet of Greek coins was, for a private collection, a remarkably fine one. It consisted at the time of his death of 11,000 Greek coins, of which 330 were of gold and more than 4,000 of silver. Several of these were unique, and

many of great rarity. An idea of the extent of the collection may be gained from the following numbers :—For example, the Syracusan series consists of 15 gold and 150 silver and bronze coins ; that of Tarantum, of 18 gold and more than 100 silver ; of Elis, there are as many as 16 didrachms, besides smaller pieces. There are rich series of Abdera and Aenus ; 10 Cyzicene staters, and 80 or 90 hectæ of gold and electrum. The Seleucidæ and the Ptolemies are also well represented ; while in each portion of the collection are to be found pieces in the most perfect state of preservation.

Among the rarities in the Fox cabinet, the following may be especially mentioned :—

The famous coin of Metapontum, with the inscription $\text{AVEAO}\Sigma\text{O AE}\Theta\text{AON}$ (*Ἀχέλοιο ἀέθλον*).

A coin of the highest antiquity of Pyxus and Siris in alliance, with the inscriptions $\text{IV}+\text{OEM}$ and $\text{M}\Sigma\text{R}\Sigma\text{NOM}$ (*πυξοες* and *σιριως*).

A Demaretion of Syracuse in fine preservation, also a tetradrachm of the fine period with the rare engraver's name $\Sigma\Omega\Sigma\text{ION}$.

The celebrated coin of Gortyna in Crete, with the inscription AOPTVNOM TO CAIMA (retrograde), *Γόρτυνος τὸ παίμα* (or as some read it, *σαιμα* for *σῆμα*).

A tetradrachm of Klazomenæ, with the inscription $\Theta\text{EO-}\Delta\text{OTO}\Sigma\text{EIIIOEI}$, and on the obverse the head of Apollo ; in fine preservation, but inferior in grandeur of style to one of the specimens of this rare piece in the British Museum, which is unfortunately much battered.³

The German government, since the death of General Fox, has purchased this collection for the sum of £16,000 ; and by means of this liberal grant, the National Coin Cabinet of Germany has been enabled to take up a position second only to those of London and Paris.

³ For most of these details we are indebted to Dr. J. Friedländer's paper on the Fox Collection, printed in the *Archäologische Zeitung*, new series, Band vi., 1873.

In the year 1856, when his cabinet was not to be compared with what it was at the time of his death, General Fox published a set of plates of unedited or rare Greek coins in his own collection, accompanied by short descriptions. The first part only of this work appeared, consisting of the coins of the European portion of the collection. The plates are by Dardel, of Paris.

Sir George Musgrave, tenth baronet, of Edenhall, county Cumberland, died on the 29th December, 1872, at his residence in Albemarle Street. He was born June 14, 1799, the third son of Sir John Charden Musgrave, seventh baronet, by Mary his wife, daughter of the Rev. Sir John Filmer, Bart., and succeeded to the title on the death of his brother, the Rev. Sir Christopher Musgrave, ninth baronet, May 11, 1834. He was a magistrate for Cumberland and Westmorland; he was among the oldest members of this society, of which he was one of the Trustees.

The late Mr. Edwin Norris was born at Taunton, October 24, 1795, and died at Brompton, December 10, 1872.

Mr. Norris derived his first education from an uncle, Mr. Henry Norris, who was the master for many years of a school of considerable repute in his native town, and a man of very varied and extensive learning. Indeed, a marble tablet to his memory in St. James's Church, in that town, stated that he was master of no less than twenty-four languages; a number which his more famous nephew surpassed by two.

On leaving school he spent six or seven years on the Continent, chiefly at Naples and other places in Italy. While there, he not only learnt the ordinary language of the country, but so thoroughly acquired the local dialects that he was constantly appealed to as an interpreter, when people from the northern parts of Italy wished to understand the special dialects of their southern brethren. During the same period

he also made himself acquainted with Romic and Armenian, so as to converse fluently in both.

On his return to England, in 1821, Mr. Norris settled for a while at Taunton, engaged in imparting to others some of that linguistic knowledge he possessed so eminently himself, till, in 1825, he obtained a junior clerkship at the India House, a position which naturally gave him many facilities for carrying on his favourite pursuit, with time, also, to work at mathematical studies, which he seemed to have loved second only to those of language. One immediate result was the compilation of the tables attached to the first "Companion to the Almanack of the Useful Knowledge Society" (but published anonymously), forming, as these did, no inconsiderable portion of the famous "Useful Tables" drawn up and printed in India, two years afterwards, by James Prinsep.

In 1830 Mr. Norris offered his services to the British and Foreign Bible Society, in aid of the translation of some portions of the Bible into the Berber language; and from that date for many years he remained in constant connection with that institution, to which he rendered many and invaluable services. Thus he is known to have drawn up for it a Maori grammar (since translated into German), and to have edited portions of translations of the Bible into Persian and Arabic (transliterated into Hebrew), in Accra and Otji (African), in Aneitan (New Hebrides), in Bulgharian, French, Spanish, Portuguese, and Italian. Besides these works he furnished to the society, in 1861, a valuable report on different editions of the Icelandic Bible.

In 1837 Mr. Norris became Assistant-Secretary of the Asiatic Society, and at once resolved to fit himself, as far as possible, for his new duties by a wide field of research, and to devote his whole time to the study of the leading languages of Asia, from Japan and China to Turkey and Arabia. With the Asiatic Society he remained connected till his death, though during his later years he only retained the title of Honorary Secretary.

In 1847 he was appointed Translator to the Foreign Office, a post for which he was peculiarly fitted, from his thorough knowledge of all the principal languages of Europe. There he would often be found, long after nightfall, deciphering and translating the bad writings of foreign secretaries of state on all imaginable subjects—an amount of drudgery which would have soon extinguished the genius, or ruined the temper, of a man of a less amiable and equable disposition. Those who know him gladly remember how then, and at all times, he was ever ready to discuss any subject with the most idle or occasional visitor; indeed, it always seemed as if it was he, not the interloper, who was the idle man.

It was a little before he went to the Foreign Office that Mr. Norris gave the first public notice of his extraordinary linguistic talents, by the deciphering of certain famous Indian rock-inscriptions, at Kapar-di-Giri; and here it was that his labours were most available for Numismatic Science. Having, as was natural, in the course of other researches, paid much attention to the remarkable discoveries of James Prinsep and of other labourers in the field of Bactrian exploration, he was able to turn this knowledge to good account, at the same time determining several characters about which, owing to the scanty fragments preserved of the Bactrian language, there had been previously some doubt. The readers of the NUMISMATIC CHRONICLE will remember the tribute paid to him by one of the ablest of our inquirers in such matters, General Cunningham, who, after a long career of usefulness, is, where he ought to have been long since, at the head of Indian Archaeology, and on the spot, in India.

In 1852, Mr. Norris gave to the Royal Asiatic Society a report on his next great work, the most remarkable, as it was assuredly the most difficult, he had as yet undertaken—the *partial* interpretation (it could not possibly be anything else) of the so-called Scythic version of the great inscription of Darius at Behistan (Mons Bagistanus), of which Sir H. C. Rawlinson

had previously made out the whole of the Persian text. In doing this work Mr. Norris reduced each letter by the aid of the pantograph, so that their exact forms have, in every case, been preserved, and thus secured for ever. The result of his interpretation showed that Sir Henry Rawlinson had rightly named this portion of the inscription, Scythic, as the original language, clothed in its present cuneiform dress, was demonstrated to be nearly connected with the group known to philologists by the name of Ugrian, and which is represented at the present time by dialects spoken by some small tribes living on or near the Volga, with manifest affinities to the Magyar of Hungary, the Turkish of the Ottoman Empire, and the Ostiak of the north of Europe. It was doubtless the language of one of those great Mongolian nations who, under the name of *Κιμμέριοι*, are well known to the students of classical history.

In 1855 Mr. Norris carried through the press a new edition of Dr. Prichard's "Natural History of Man," in which he showed an ability in dealing with ethnology not less remarkable than that he had previously shown in the case of language. Indeed, it may be fairly assumed that, to any observing student, who laboured so well and so successfully with the curious languages of Africa, as well as of Asia, the study of the races who spoke them would follow as a natural result. In fact the two studies supplement one another—perhaps it might be more truly said are necessary for the adequate appreciation of each.

The work which Mr. Norris undertook in behalf of the British and Foreign Bible Society has already been mentioned; but it may be added here, that in the course of this he was led to take a very extended view of the African groups of languages, the published results of which was "A Vocabulary of the Languages of the Mozambique," "Dialogues in Arabic, for Haussa and Bornu," and grammars for the "Vei and Falah Languages." The second of these, the Bornu, one of the most peculiar of the strange tongues of Northern Africa, Mr. Norris deciphered from

a series of dialogues in that language, written in Arabic characters, and accompanied by an Arabic translation. This work he edited for the Foreign Office, and from an analysis of a great many individual words, deduced the grammatical elements of a language which, both from its isolated position among other African dialects, and from the interesting account given of the people who speak it by Dr. Barth, during his residence at the capital of Bornu, has engaged the especial attention of linguistic students.

In the year 1859 the University of Oxford printed for Mr. Norris, at the Clarendon Press, his "Ancient Cornish Dramas," one of the most valuable contributions to Celtic literature which has been as yet made public. Mr. Norris had for some years been busy with this subject, in intervals of leisure, and had an especial interest in these ancient Cornish legends, embodying as they do many portions of Biblical history, under the guise of legendary tales or of miracle plays, in the now extinct Celtic dialect of Cornwall. To make his work as complete as possible, Mr. Norris himself visited many of the villages wherein up to the commencement of the present century some remains of the ancient tongue were still existing, and in the course of his rambles was lucky in meeting with an old man who had learned from his grandfather the Lord's Prayer in Cornish.

Having done with the extreme west, Mr. Norris now reverted to the still earlier love, the languages of the east, whose fragmentary records have come down to us in the cuneiform inscriptions of Assyria and Babylonia. In the pursuance of these studies, he was, about the year 1854, definitely associated with Sir H. C. Rawlinson, in the editing and publication (at the cost of the Trustees of the British Museum) of the vast collection of Assyrian texts preserved on the Monuments now in the National Collection. On this work he was continually engaged up to the time of his death, having retired from active duties at the Foreign Office, that he might be the

better able to devote his whole energies to it, and to the preparation of the most enduring monument of his fame, his Assyrian Dictionary. Of this most remarkable result of unwearied labour, continued over more than a quarter of a century, three volumes have appeared as far as the letter N, and the MS. of the remainder is nearly complete, and will shortly be published under the care of a competent editor. Mr. Norris, with his accustomed modesty, thought but little of this great work—indeed was wont to speak of it but as a collection of materials for further researches—mere jottings made by him in the course of his attempts at deciphering. Future students will appreciate it more highly.

In conclusion, we may add, that Mr. Norris's knowledge of languages was so universal, that he might more truly be said to have known language in every possible form, than to have had merely a sufficient acquaintance with a large number of individual tongues. His knowledge resembled the framework of a house, complete in all its parts, and which merely required filling up whenever it should please the builder to do so. We have all heard tales more or less mythical of Magliabecchi and Mezzofanti, but of Norris we have clear and undoubted evidence, often lacking in the reports of those eminent linguists. It is, perhaps, not too much to say that, as he was unquestionably the greatest linguist which England has produced, so he has not met his equal, still less been surpassed, by any one of the great scholars of Continental Europe.

The Council are glad to be able to congratulate the Society on the satisfactory condition of its finances.

The Treasurer's Report is as follows :—

Statement of Receipts and Disbursements of the Numismatic Society, from June, 1872, to June, 1873.

Dr. THE NUMISMATIC SOCIETY IN ACCOUNT WITH JOHN FREDERICK NECK, TREASURER. Cr.

	£	s.	d.	£	s.	d.
To Messrs. Virtue & Co., for Printing Chronicle, Part 45	24	16	0			
" Ditto ditto	32	16	6			
" Ditto ditto	24	7	4			
" Ditto ditto	36	18	7			
" Mr. F. J. Lees, for Engraving	31	10	0			
" Purchase of £102 1s. 3d. Three per Cent. Consols, at 92½=£94 0s. 6d. Brokerage 2s. 6d.	*94	3	0			
" Mr. Vaux, Rent to Christmas	10	0	0			
" Ditto, for Dividends overpaid by him	4	8	9			
" Mr. Head, for Postage, &c.	1	12	0			
" Messrs. J. Davy & Sons, for Printing	1	6	0			
" Fire Insurance on £500.	0	15	0			
" Mrs. Sotheby's Subscription returned to her Bankers	1	1	0			
" Mr. Vaux, Rent and Expenses to Midsummer	12	9	0			
" Mr. Head, for Postage, &c.	2	18	9			
" Collector, for Commission and Postage	7	17	11			
" Balance	169	3	1			
	£456	2	11			
By Balance from last statement				236	3	5
" Dividends on £305 17s. from July, 1871, to July, 1872, per Mr. Vaux (£4 8s. 9d. returned, see debit)				13	12	4
" Mr. Head, for Chronicles				5	11	2
" Mr. J. R. Smith, for ditto				47	0	0
" Entrance Fees				15	15	0
" Annual Subscriptions, including 8s. paid in advance				137	19	0
" Remittance for Postage				0	2	0
				£456	2	11
By Balance in hand				169	3	1

J. FREDERICK NECK, HON. TREASURER.

* The total amount of Consols now held for the benefit of the Society is altogether £407 18s. 3d.

The Meeting then proceeded to ballot for the officers of the ensuing year, when the following gentlemen were elected :—

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NUMISMATIC SOCIETY
OF LONDON,
DECEMBER, 1873.

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OF THE
NUMISMATIC SOCIETY
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DECEMBER, 1873.

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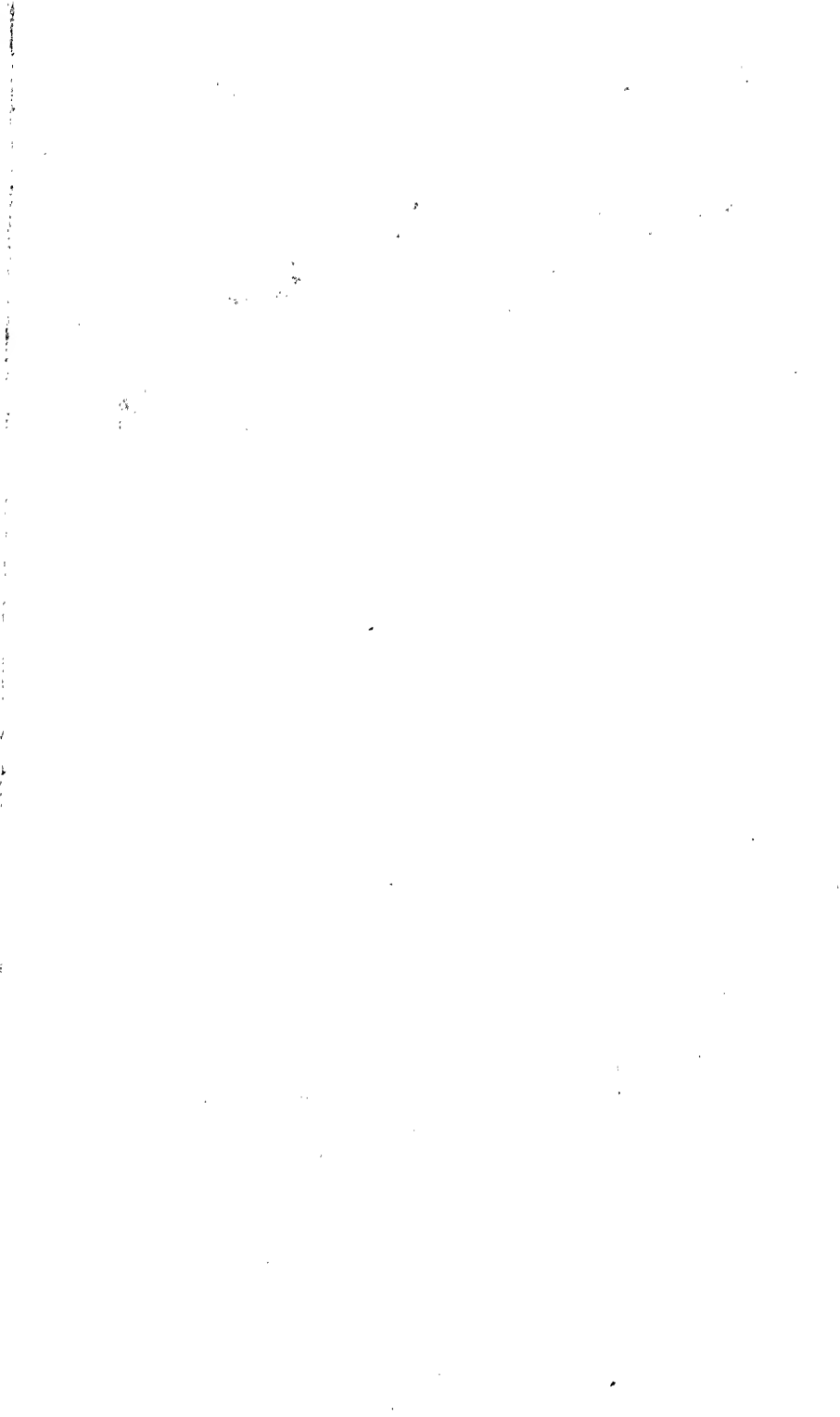
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